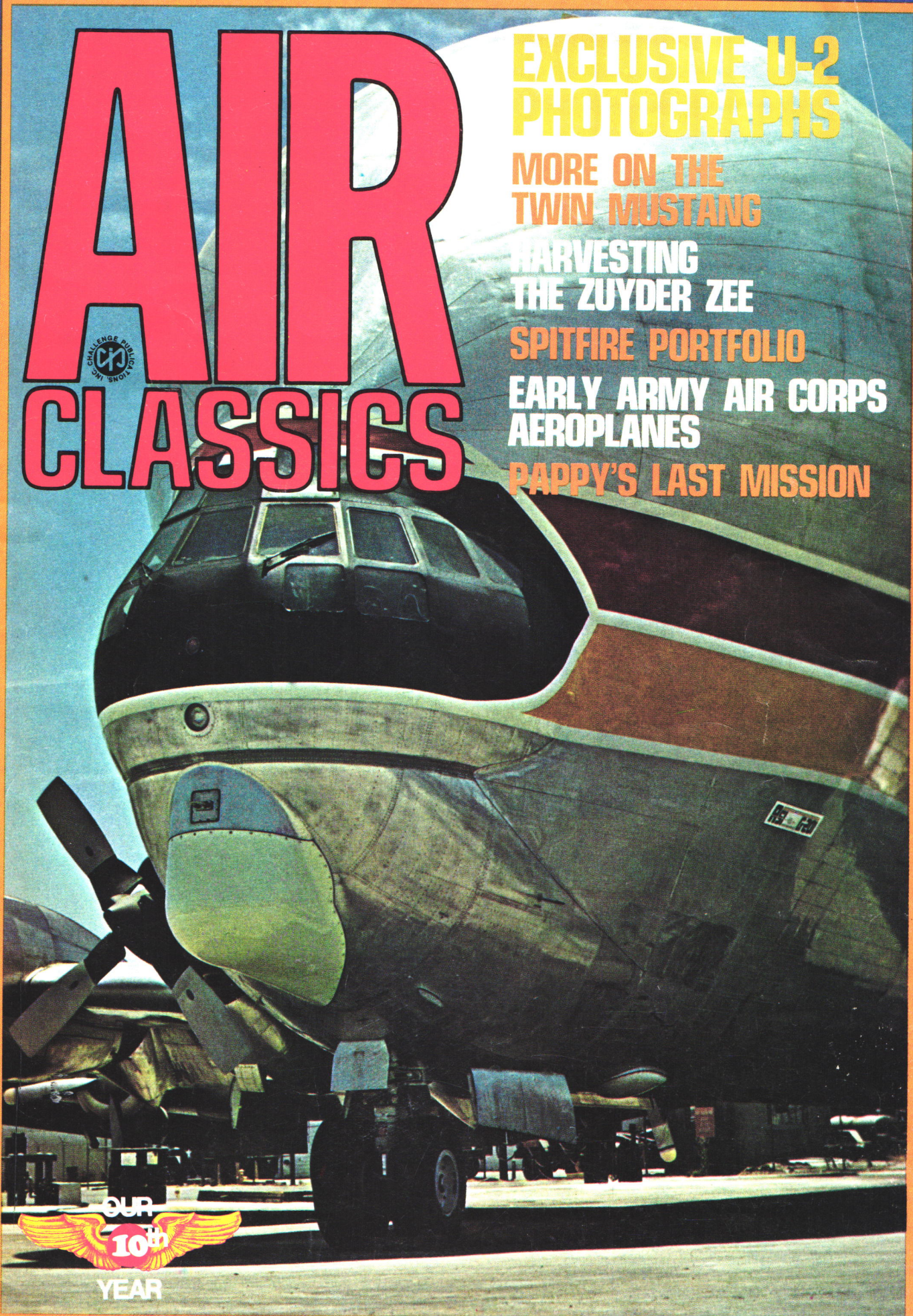


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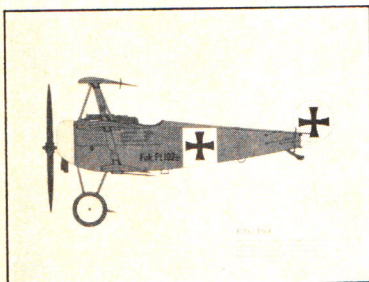
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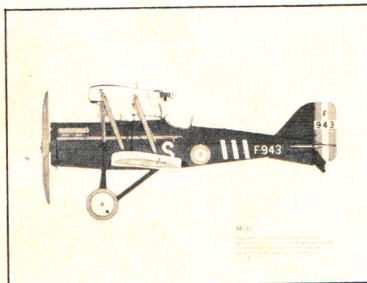


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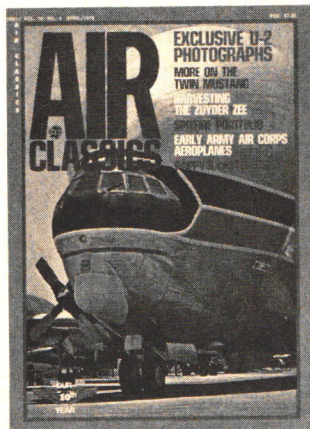
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The last of the Guppies. The G201A was one of two modified Boeing transports built for carrying sections of the A.300 and Concorde in France.

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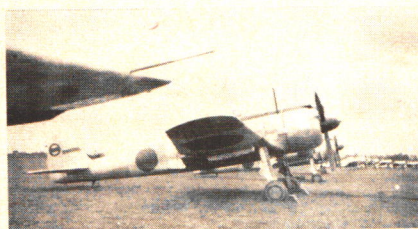
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Dear Sir:

I really enjoyed your story on the Reno and Mojave Air Races in the Feb. '74 issue of *Air Classics*. I am amazed that Galloping Ghost (Miss Candace) is still racing. But you skipped right over P-38 N25Y, which you only casually mention as being there with the Confederate Air Force. N25Y also raced at Cleveland in the '40s! Chuck Walling flew it as racing number 14 in a red and white paint scheme, sponsored by Sky Ranger Aviation Oil! How about some photos of this old racer as it is now. I would like to see you print color shots of all the big bore racers. In the future they would be worth their weight in gold to racing nuts like me.

Bruce Fraites  
Taylor, Michigan

(Editor's Note: N25Y did NOT race during the '73 Mojave/Reno races. It flew at Mojave in an aerobatic demonstration by Lefty Gardner. It is one of the few surviving Cleveland racers. For you race and warbird fanatics, *AIR CLASSICS* will soon be publishing an all-color special issue on Warbirds.)

Dear Sir:

I read with interest Mr. Pennington's letter in the January 1974 issue of *Air Classics*, commenting on my letter in the September 1973 issue. His notes are of much interest, but they are not altogether correct.

I can confirm that there were 16 Harvards in Malaya with the Malayan Auxiliary Air Force, and that six of these were with the Singapore Wing at Tengah. These aircraft were of the RAF, and in addition to these several RAF squadrons had Harvards alongside other types. Thus the number of Harvards in Malaya according to my data was some twenty to twenty-five.

Mr. Pennington claims that the oldest Harvard the Singapore Wing had at the time was KF123, but this is quite impossible, since KF123 was

supplied to the Royal Indian Air Force in 1947. The aircraft referred to by Mr. Pennington should be KF 132, which joined the Singapore Wing in September 1953.

KF132 certainly was not the Wing's oldest Harvard, and actually it was the youngest Harvard with the Singapore Wing. It had been completed by Noorduyin in March or April of 1944. Between November 1952 and November 1956, Harvard FE959 was the oldest one on strength, having been completed in April 1943. After November 1956, until withdrawal of the type in 1957, Harvard FE145 was the oldest one on strength, having been completed in July 1942.

For your interest, I think I should record that the above details are based on the official Royal Air Force files, and that hence these notes are first-hand information of hard facts. In contrast, Mr. Pennington's notes would seem to be based on reminiscences, which are not always 100% reliable. However, the notes on the use of Harvards are in essence correct.

Meanwhile I trust these notes will be of interest, and I hope they will be useful for *Air Classics*.

Ton le Nobel  
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Dear Sirs:

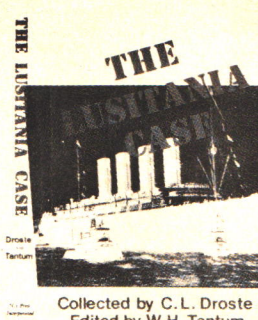
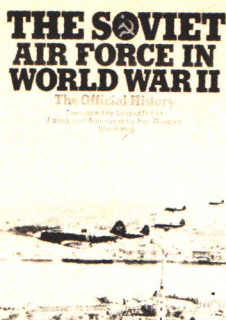
After my last visit to the Air Force Museum at Wright-Patterson AFB, Ohio, and a subsequent letter to the A. F. M., I decided to write to see what you and your readers, myself included, could do to get the A. F. M. to repaint and recondition some of the aircraft in the A. F. M.'s Aircraft Park. To begin with describing the advancing deterioration of some of them:

North American F-107A ser. 55-5119: the paint is deteriorating badly on this aircraft, and all it would really need to be presentable once more is a new paint job. This also goes the same for the following aircraft: North American B-70 Valkyrie ser. 62-001; Northrop YF-5A ser. 59-4989A; Douglas RB-66B Destroyer ser. 53-475A; Convair B-58A Hustler ser. 59-2458A; McDonnell F-101B Voodoo ser. 56-235A; C-119J Flying Boxcar (Fairchild) ser. 51-8037; Ling-Temco-Vought XC-142A, V/STOL Transport, serial unknown; P.1127 Kestrel (Hawker-Siddeley now known as the AV-8A Harrier), ser 64-18262A.

The aircraft that needs refinishing in the worst way due to its historical significance is the Boeing B-52B-35-BO Stratofortress, "Lucky Lady III,"

(Text continued from page 8)





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serial 53-394A. This aircraft was one of three that flew non-stop around the world on January 8-9, 1957. On this B-52 you can hardly make out the markings, the paint job is so far gone that the white star on the National Emblem cannot be seen any longer. I could just make out her serial number. This "bird" is in terrible shape. A real blemish on the Air Force Museum's reputation. The aircraft are almost as bad as Willow Grove was.

I and others have volunteered our

time and efforts to repaint these aircraft, but quoted below is the reply from Mr. Charles G. Worman, Acting Chief, Research Division A. F. M., dated October 29, 1973.

"We appreciate your offer to assist in the restoration of various aircraft in our collection, but unfortunately we must reject your kind offer as we have had to do to others who have made similar proposals. Work on aircraft is done in a restricted area of the base where individuals who are not military or government employees are not permitted. The use of volunteer workers would also raise serious problems involving government liability in case of accident, etc."

What I meant when I volunteered was to refinish the aircraft where they are at as most only need to be repainted, or move them to the part of the old runway just behind the Aircraft Park and A. F. M. Building, keeping them in the restricted area where visitors are not allowed. But still in sight of and in the area of the A. F. M. the visitors could see that the aircraft were being refinished or repainted and the aircraft would never actually be off of display. Which they would be if they

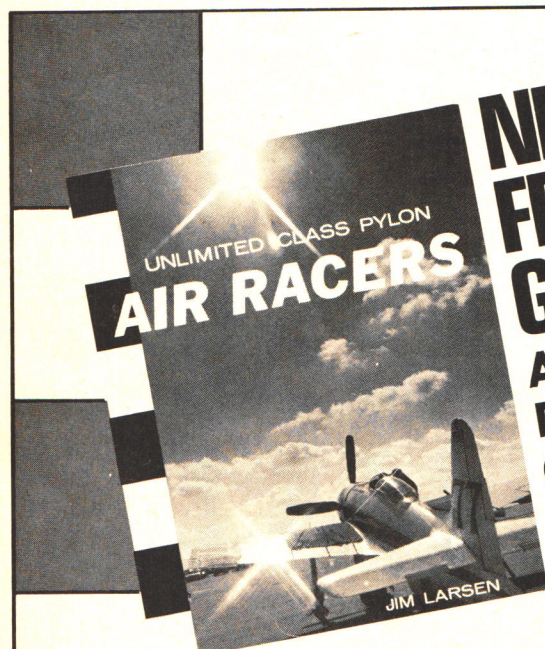
were taken over to the restoration hangars on the far side of the base. I hope that you will publish this in your column.

John Brian Lameck  
Windsor, Ontario, Canada

Dear Sir:

I read with avid interest "Rebirth of the Gooney Bird" in your October issue of *Air Classics*. As a Vietnam era airframe mechanic (tin bender), I had the opportunity to observe the "Goon" in one of its latest and least publicized roles, that of an electronic aircraft. Configured as a platform for sophisticated electronic gear and intelligence technicians, the "Electronic Goon" monitored sensing devices dropped and planted along such famous (or perhaps infamous) areas of South East Asia as the Ho Chi Minh Trail and other areas of enemy operation throughout the SEA theater.

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Electronic Warfare Sqd. at Da Nang Air Field. From these locations the EC-47s flew some of the most important missions of the air war in South East Asia.

Along with it's electronic missions the C-47 also served in its role as a cargo and personnel carrier. As it performed in two previous conflicts the Gooney Bird hauled everything from VIP's on inspection tours to troops on R&R flights and from precious cargos of medical supplies to beer and cigarettes for outlying fire bases.

Many a Vietnam veteran will remember the C-47 as the plane that carried him to Bangkok, Taiwan, or Hong Kong for a few days' respite of R&R from the jungle of the combat zone.

The men who maintained her often were amazed that the "Goon" could operate with such a minimal amount of major repairs. I once was told by a 20-year-veteran crew chief that with a little tender loving care the "Goon" can fly forever.

Steven Pennington  
Lynnwood, Washington

Dear Sir:

I have just read your article on "A Gathering of Warbirds," by Michael O'Leary, in the January 1974 issue of *Air Classics*. It is a tremendous article, to say the least.

I am a radio-controlled model aircraft builder and flyer, and a scale World War II enthusiast. In the article, there was a photograph of a Hawker Sea Fury owned and flown by Lloyd Hamilton.

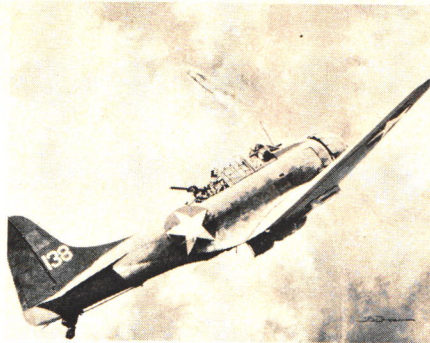
At the present, I am halfway through building a sixty-inch wingspan Sea Fury and have arrived at the stage of installing the cockpit detail. I have some information and photographs of various Sea Furies showing markings and some detail, but pictures, either black and white or color, of the cockpit interior seem non-existent as far as the effort on my part with correspondence to difference sources; the results have been nil.

Could you possibly give me any leads in this direction?

Carl Small  
Winona, Ontario, Canada

(Editor's Note: Look for March 1974 issue of "Sport Flying." It features a complete story on Mr. Hamilton and his Sea Fury.)

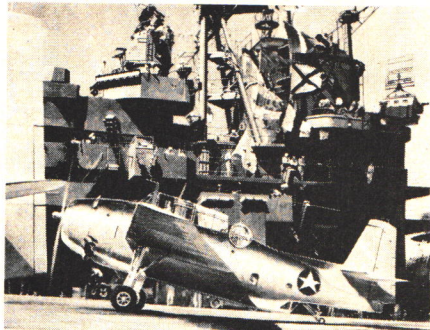
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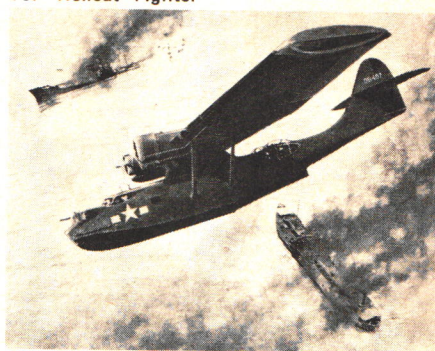
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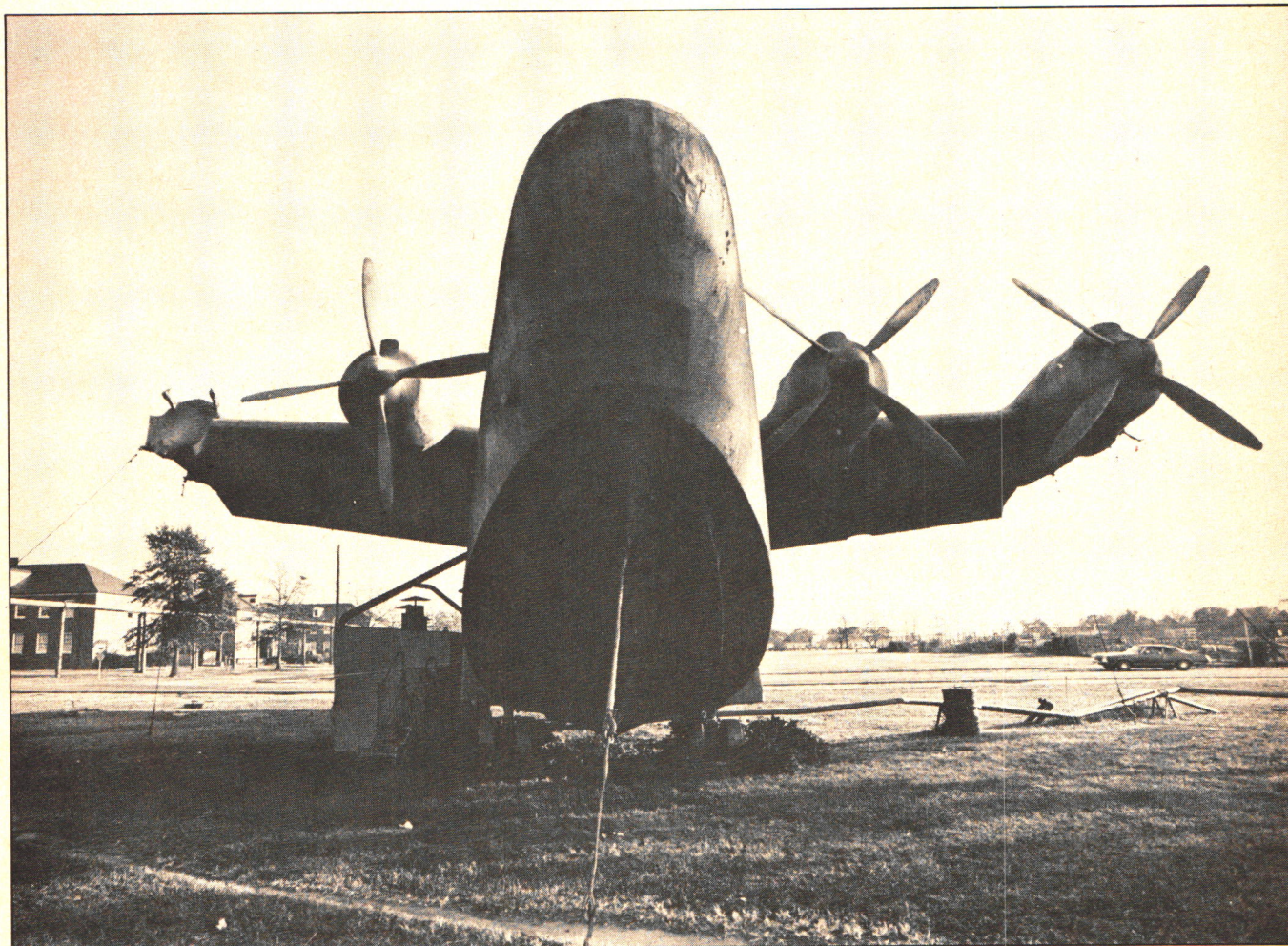
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# NEWS OF INTERESTING RESTORATIONS, **WARBIRD REPORT** AIR RACING & MUSEUM ACTIVITY AROUND THE WORLD.



**EMILY AT NORFOLK.** Ray Bottom, editor of **Antique Airways**, reports that the Japanese Emily flying boat is, despite some contrary rumors, at NAS Norfolk. "I found that the Emily is apparently available to any serious, bona-fide organization who will remove the big bird and display her properly. Quoting the Public Information Officer, 'The Emily is in cocoon until somebody wants it. We have no plans for it at this time.' This is the same aircraft that was tested after the war and the Navy has stored the wing panels and engine that are missing in the photos. The plane is virtually intact. Even the rear turret is still there, as is the hard rubber and steel beaching gear on which the ship has rested for the last 25 years. Props, spinners, radio antennas masts, turrets, and lifting cable assembly are all clearly visible beneath the removable grey cocoon. The small metal building beneath the number three engine was the de-

hydrating plant built for the Emily and a PBV that was here until last year when it was moved to the USN museum at Pensacola for permanent display. The small building may have provided steam heat to the innards of these ships, or perhaps fed a dehydrating vapor of some sort.

"Since U.S. forces demanded that Japan destroy at once the hundreds of intact aircraft left following the surrender (and they did), I would think that some museum, perhaps the Japanese, may want the Emily back to restore for display. I understand that they are very anxious to obtain any surviving examples of Japanese WW II aircraft."

The Emily hopefully will be restored and kept in this country. If not, the Japanese probably would be quite pleased to have the big boat. Unfortunately, the American enthusiasts have lost the last flying example of an authentic Japanese WW

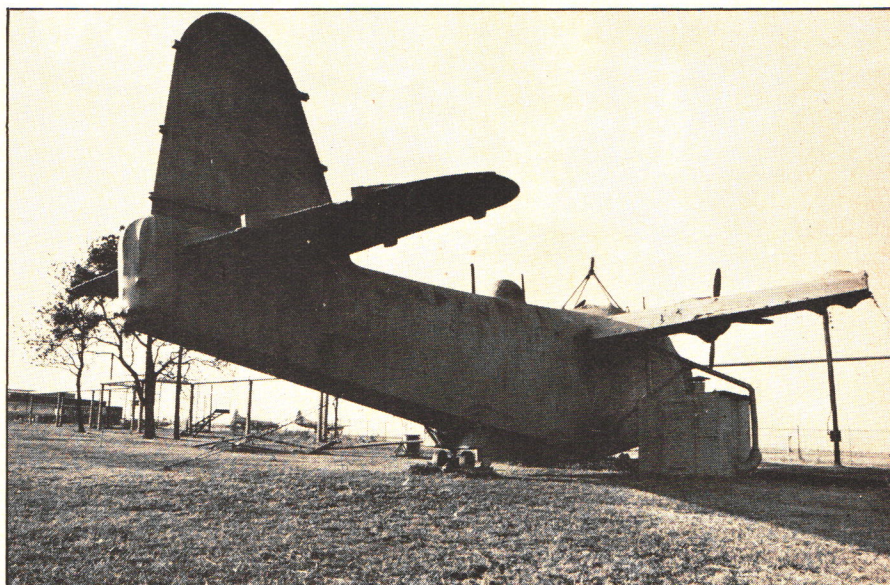
II fighter. The Ki-84 Frank, formerly of Chino, has been sold to the Japanese after being transported overseas for the Japanese Transpo Air Show. The Ki-84 will probably be in better hands with the Japanese than with the previous group who had allowed the rare aircraft to rot and become derelict. For a complete report on this particular aircraft be sure to read our sister publication, **Air Combat** (new series), Vol. 1, No. 1.

On the subject of rare Warbirds being sent out of the country, we have heard disquieting reports that the unique Do-335 fighter that is currently rotting at the Silver Hill storage facility of the National Air Museum, will be sent to Germany. We oppose this move as the German Air Museum restores their fighters in inaccurate markings and has the cute habit of skinning certain sections of their display aircraft to allow the public to look inside and ponder on the wonder of it all.



The Emily is up for disposal to some qualified group and it is hoped that some museum, U.S. or Japanese, will acquire the craft to save it from scrapping. (R. Bottom)

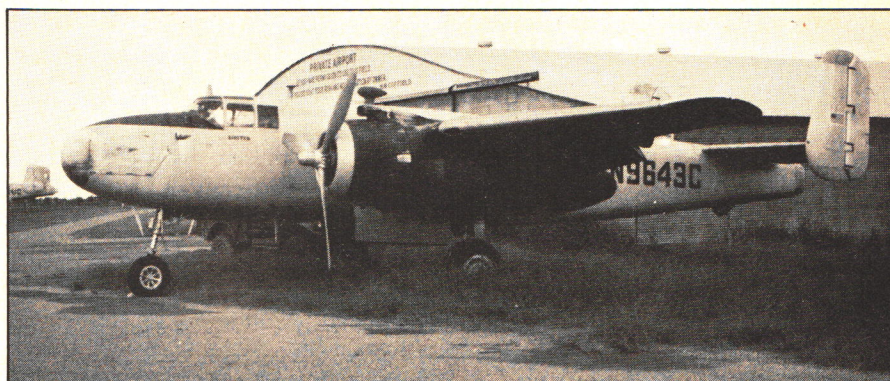
Frontal view of the massive Emily flying boat that is preserved at Norfolk NAS. The outer wing panels and missing engine are reported to be in storage. (R. Bottom)



N9643C is one of the four B-25s at Rockdale, Texas. (P. Byrns)



The wrecked On Mark A-26 that is located in Alaska. The owner says that N4824E is free for the taking. (M. Neligh)



HOWARD HUGHES RELEASES AIRCRAFT. In what may be a significant break-through for aircraft preservationists, the Hughes Tool Company has released a Convair 240 transport to the Antelope County Air Museum. If the group flies the 240 out of Santa Monica (California) Airport, where it has sat derelict for the last twenty years, they will receive a rare Douglas A-20 Havoc and a B-25 Mitchell that are derelict at the Hughes Airport in Culver City, California. The rare and seldom seen Hughes Racer of the 1930s is stored at the Culver City facility and is, from reports, in excellent condition.

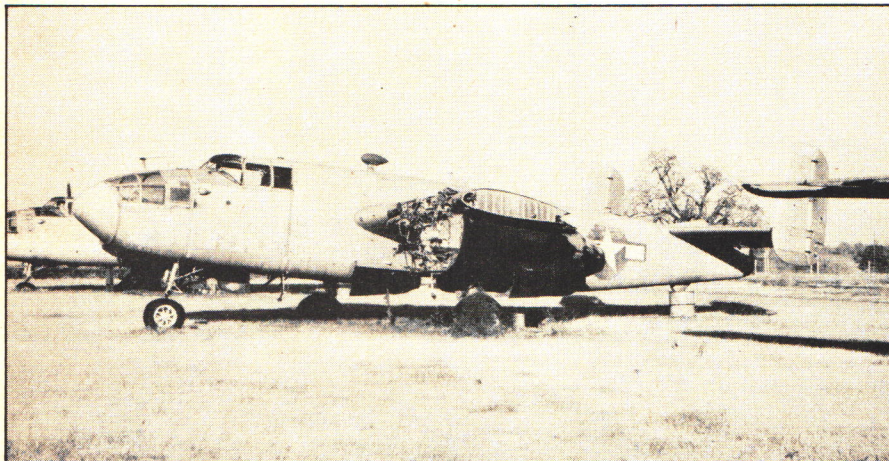
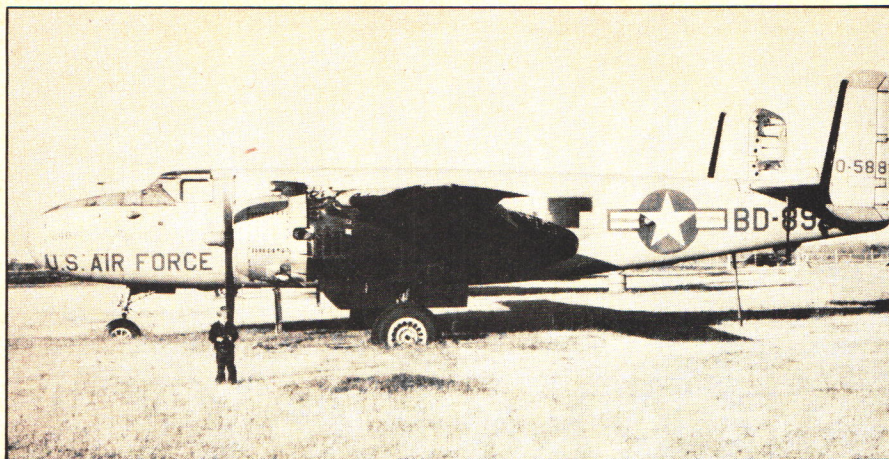
The Antelope Valley group has worked on the Convair a number of months to put it in flyable shape but the airport manager, in a burst of bureaucratic shortsightedness, has decided not to let the plane fly from the field as it might be "a danger to the community." Although Santa Monica has its share of light plane

crashes, we do not see the airport manager running out on the runway to stop the flow of Cessnas and Pipers. He also let another plane, a Douglas DC-7 that had been sitting for 20 years, fly out recently. This plane was still owned by Hughes and perhaps he thought better of trying to stop a multi-billion-dollar organization from doing what it wanted. It is a known fact that Howard Hughes is an aviation supporter and we applaud his decision to let some of his rare planes go on display in museums.

#### DOUGLAS DOLPHIN FLIES AGAIN.

The last surviving example of the Douglas Dolphin amphibian recently took to the air again. Now owned by antique enthusiast Colgate Darden of Columbia, S.C., the rare bird has been restored to mint condition. The plane had once been named "Rover" and had been owned by William Boeing. The Dolphin sat for many years at the Long Beach, Calif.,





Airport until it was sold to a group who intended to use it for charter work in Florida. Apparently the plane was damaged and the present owner stepped in to save this rare machine from complete oblivion. Mr. Darden also owns a Douglas DC-2, Lockheed Electra, and a Spartan Executive.

**FORT WORTH B-36 STILL MAY BE SAVED.** The B-36 bomber that has been on display for a number of years at the Greater Southwest Airport between Dallas and Fort Worth may yet be saved. A group of enthusiasts spent hundreds of hours working on the big craft to put it back into flying condition. Almost all the engines had been put back into flying condition when the Air Force took the plane back from the group. Apparently the USAF did not want civilians flying the bomber to a new home. It was to be a one-time-only flight to prevent the aircraft from being scrapped when the land that it presently occupies is developed. Now, the Museum of Aviation Group, which is negotiating for a lease for a museum at the Dallas-Fort Worth Airport, received official word on 10 December 1973 that they were now in charge of the B-36 which will be on loan from the Air Force Museum. The Peacemaker Foundation (the

former group) lost the bomber during November when it failed to put up a program for saving the bomber that satisfied the Air Force, and the Museum of Aviation Group was the next organization in line that had expressed an interest in the craft.

John Irons, president of MAG, said he will meet with Tom Neely, a structural expert from General Dynamics, on possible ways of transporting the mammoth aircraft. The group claims that it would be difficult to transfer the plane across land in one piece and Neely said that the plane could be disassembled and bolted back together because it would not have to have the same structural integrity that it would require to be flown. Needless to say, we are opposed to the cutting apart of the bomber by the MAG group and then "bolting" it back together for display. This equates to a junk airplane that has been put back together crudely to make a "display" that will satisfy the general public. Usually projects of this type have ended with the aircraft in question being cut up completely. B-36s are much too rare to cut up and then bolt back together. Keep the B-36 intact!

**RESERVE UNIT REBUILDING B-10.** Daniel F. Alves, Captain USAF, sent

Although looking a bit weathered, this TB-25N-35-NC is virtually complete but would need quite a bit of work to be airworthy again. It is interesting to note that some of the B-25s at Rockdale have virtually intact military markings. (B. Courtney)

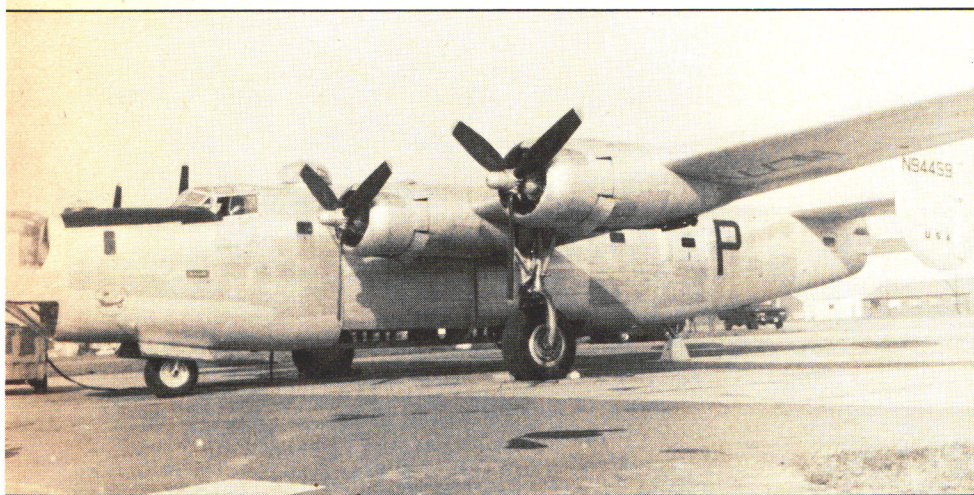
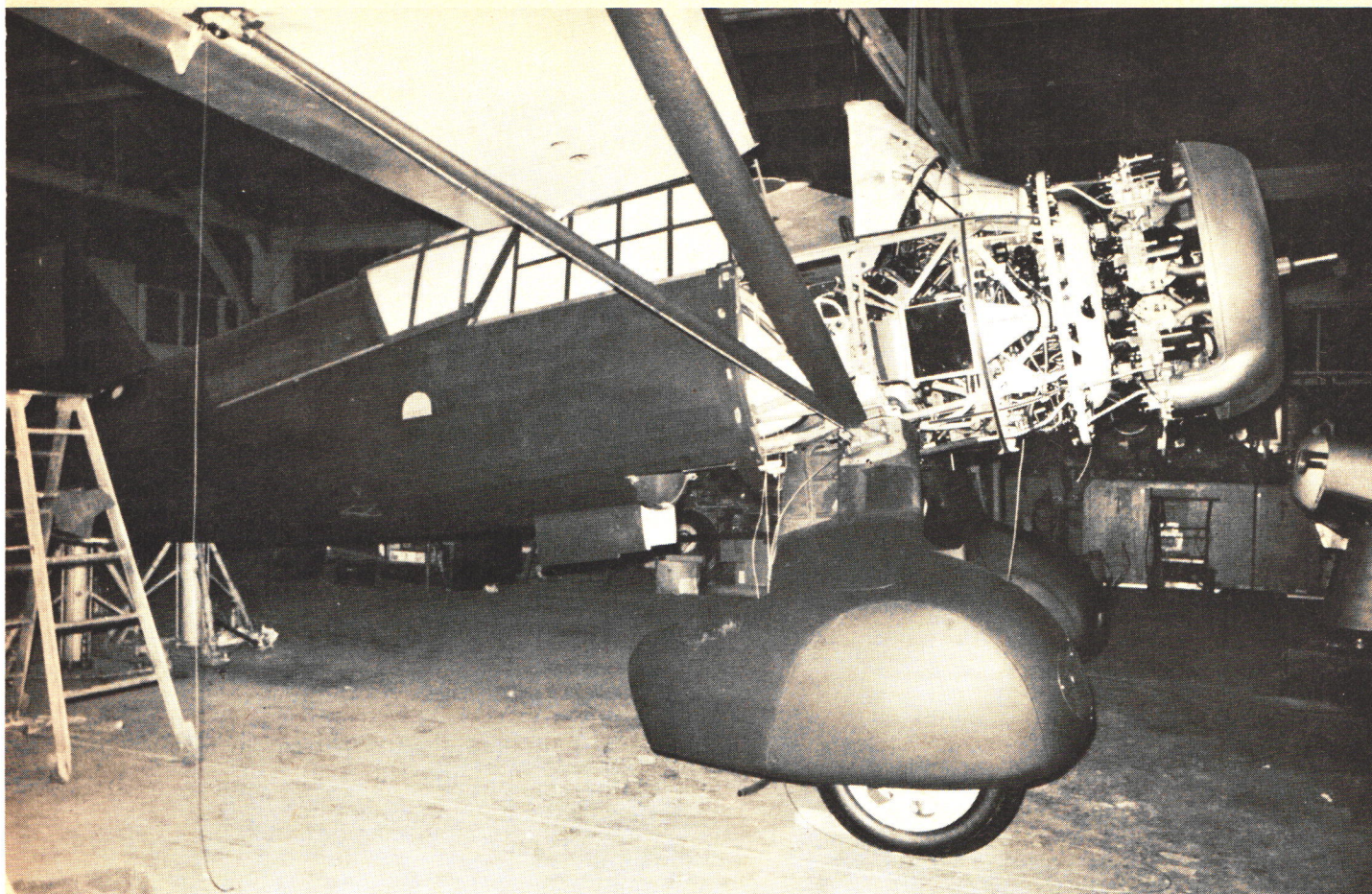
Dwight Brooks' Lysander in the hangar at Volpar. As can be seen the craft is virtually complete and will almost certainly have flown by the time this issue is on the stands. (D. Brooks)

This TB-25K probably won't be going anywhere in the near future. S/n44-30090 carried the civilian registration of N-9633C for its ferry flight from a surplus yard to Rockdale where it has not moved since. (B. Courtney)

N94459 is the registration for Yesterday's Air Force's B-24J, ex-Indian Air Force, USAAF s/n44-44272, at RAF Mildenhall.

B-25 N9643C is in flyable shape at Rockdale. (B. Courtney)





in a clipping from the **Air Force Times** newspaper that gives additional data on the B-10 being rebuilt for the USAF Museum. "A 1932 vintage B-10 is slowly being pieced together in a hangar at Kelly AFB, Texas, by Reserves of the 96th Maintenance Squadron.

"The B-10 was found in a forgotten corner of the Argentine Air Academy where it was being used as a mock-up trainer. Following some lengthy negotiations between the academy and the AF Museum, it was presented to the U.S. It is the only B-10 known to be in existence. Since it is the job of the 96th Maintenance to repair battle damaged and crashed aircraft, the AF Reserve gave the squadron the go-ahead to put the aircraft back into shape. It's a tough job according to the squadron spokesman, since the B-10 was cannibalized for parts over many years and replacements are hard to come by.

"The B-10 was the first U.S. bomber to have a movable turret, the first to have bomb bay doors, and a remarkable range of around 1,200 miles and a ceiling of 24,600 feet.

"The plane carried a crew of three and a bomb load of 2000 pounds. The wing span is 70 feet and it is powered by two Wright Cyclone radial engines putting out 775 horsepower each. The men of the 96th are putting the old

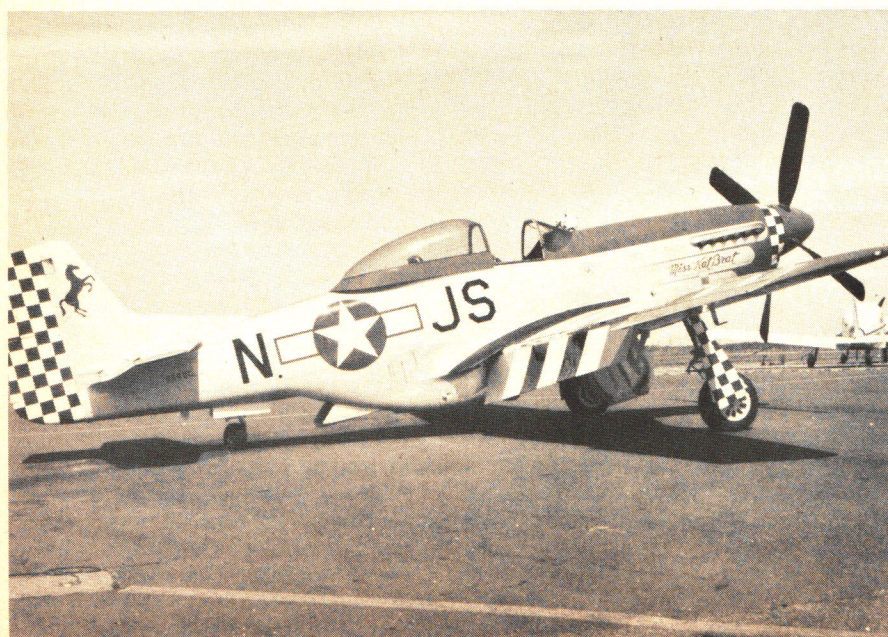




One of the rare Waco CG-4As that is doing a static deterioration test in downtown Fresno. (G. Liang)



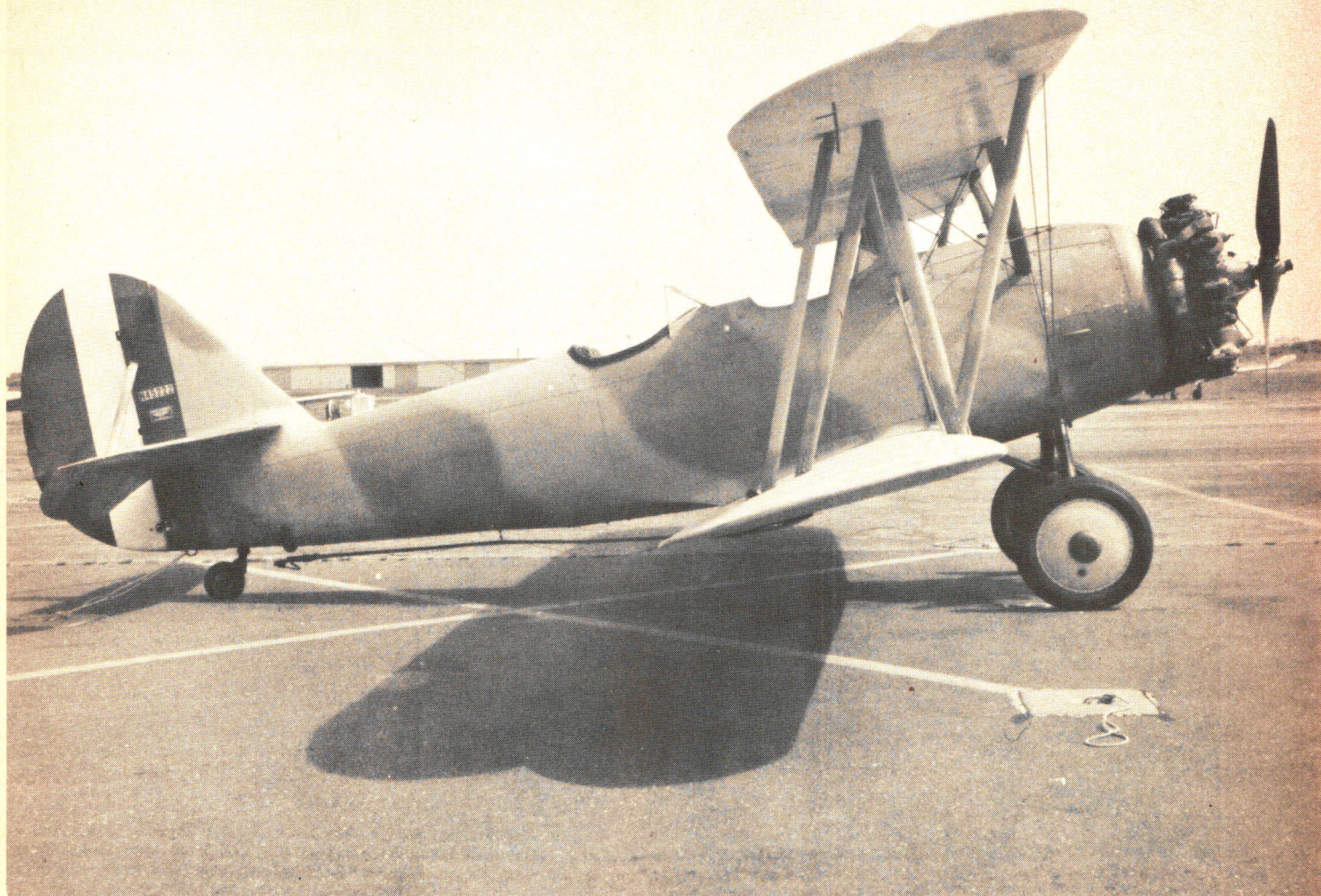
Waco CG-13 remains at Rockdale. (B. Courtney)



This N3N-3 is one of three flying from Bader Field pulling banners over the beach at Atlantic City. N45222, s/n2734, and its stablemates are painted in colors of Allied and German WW I aircraft. (R. O'Dell)

After many years of restoration, Mustang N988C once again took to the air recently, resplendent in representative WW II markings. The craft is owned by Robert J. Shaver and once served in the RCAF as Mustang IV #9275, USAAF s/n44-74009. (R. O'Dell)





B-10 back into shape on a voluntary basis.

"We'd like to find someone who might have some old instruments like those used in the B-10," a unit spokesman said. "There are a lot of parts missing and they just don't make parts like these anymore."

"The volunteers are manufacturing many of the parts needed, 'but it's a real challenge,' said the spokesman, 'because much of the aircraft is built so differently than we now build aircraft.'"

We will keep readers informed on the progress of the reconstruction of this rare Warbird.

**ROCKET PLANE FOR SALE.** Louise Moran Moody is in the possession of the Greenwood Lake Kessler Rocket Plane. Although the USAF Museum would like to obtain the aircraft, Mrs. Moody would rather sell the unusual machine to an interested collector. The following information on the craft is from a recent newspaper article. "Hanging in a barn, covered with dust, forsaken by time, is America's first rocket-powered winged aircraft.

"When it was shiny new on Feb. 23, 1936, it made history by carrying 6,159 pieces of mail across the New York-New Jersey state line. This was the first rocket mail in the history of the world.

"It wasn't much of a flight. The entire distance was something under 2,000 feet across the surface of the ice, but 700 observers saw the 'Gloria' lift off the surface, slide a bit, soar again to 30 feet and then cross the line. The mail on board that day was postmarked Hewitt, N.J., and the envelopes and postcards that were aboard are now collectors' items.

"The craft was powered by a liquid fuel engine designed by a German immigrant named Willy Ley. It used liquid oxygen and kerosene. The experiment was backed by a New York City stamp dealer named Frido W. Kessler, who had provided the money contingent on the fact that the craft carry his first day covers.

"Mike Moran of Greenwood Lake built the launching ramp, and thus may find his place in history as the first builder of a commercial roc-

ket launching pad. John Schleigh, who was an official of Greenwood Lake, N.J., at the time has described the launch: 'It was a cold day, there had been a lot of snow the day before. We didn't think many people would come, but there was a crowd.' (The sponsors had wined and dined the press in order to get coverage.)

"When they launched the first rocket it dived down off the platform and skidded across the ice at the newsreel photographers. They all ran for cover and it was a pretty funny sight.

"Then we put the second rocket on the ice and it took off and crossed the state line. We considered the flight a success."

"Schleigh had joined the project out of an interest in stamp collecting, but he became involved in the drive of the rocketeers and ended up using his influence to help the flight.

"We didn't really know where it was going," he says. "We didn't have any insurance or anything. A state trooper asked me where it would land and I told him I didn't know, but that it was safe. He knew me and

(Text continued on page 80)



# READERS FORUM



P-38 Lightning "Putt Putt Maru," piloted by Col. Charles McDonald, highest living Southwest Pacific Ace (27 victories). Men are identified merely as Freeman, Blakeley (Lt., pilot of "Arkansaw Traveler," in center), and Dowler (author).

"Arkansaw Traveler," P-38 piloted by Lt. Blakeley.

Dear Sirs:

*Air Classics* does an excellent job of keeping its readers informed about aviation both past and present. So I thought it might introduce the "Putt Putt Maru." The "Putt Putt Maru" was a P-38 Lightning that winged over New Guinea, the Philippines and other areas of the Southwest Pacific during World War II.

It was piloted by Col. Charles McDonald, C.O. of the 475th Fighter Group (Satan's Angels) Fifth Air Force. Col. McDonald ended the war with 27 victories, the third highest ace in the Far East and the fifth highest (aerial victories) ace in the war.

But let the "Putt Putt Maru" tell the story:

Although they were designed primarily to intercept bombers, P-38s were developed into the most versatile aircraft of the war. For example, they flew reconnaissance; escorted medium and heavy bombers; covered parachute drops, troop landings and convoys; and also strafed and bombed enemy ships and installations. What's more, the J & L models, when equipped with aileron boost and dive flaps, made the P-38

a top fighter which destroyed more enemy aircraft than any other plane in the Southwest Pacific.

True, the early P-38s had problems. In 1939 the Army foolishly decided to make a transcontinental flight in the prototype, the XP-38. A speed record was set but the pilot undershot the runway and crashed during landing.

After production finally started, flight tests disclosed a certain amount of tail buffeting and poor dive recovery. But by changing the tailplane incidence and increasing the elevator control these problems were solved.

Later, improvements such as bullet-proof fuel tanks, armor plating, improved visibility and maneuverability were made. The L model, equipped with twin Allison liquid-cooled engines, could develop 1600 hp each at war emergency. It could fly 360 mph fully loaded and had a 44,000 foot ceiling.

When equipped with two 300-gallon belly tanks it had a fuel capacity of 1000 gallons and a range of well over 2000 miles. The J & L models were armed with four 50-caliber machine guns, a 20mm cannon, and

could carry a 4000-lb. bomb load.

The 475th was formed at Amberly near Brisbane, Australia, in May of 1943. We arrived at Port Moresby in August of 1943 and were soon slugging it out with Japanese planes over Wewak, Finschafen, Lae, and Rabaul. The Zekes and Oscars were tough little bastards, if you fought their fight; low and slow. We soon learned that teamwork and airspeed (over 300 mph) paid off. When enemy aircraft were sighted we'd form trail formation; the flight leader would fire, then start a shallow climbing turn, positioning himself to protect his flight while they fired. When a plane was damaged other planes escorted it to safety.

If you looked back and saw a drab green wing blinking, you'd fire-wall those twin Allison's and start a shallow climb toward your buddies or dive. This worked because in two years the 475th flew over 3000 missions, destroyed 551 enemy aircraft and received three Distinguished Unit Citations. It produced such leading aces as Congressional Medal of Honor winner Tommy McGuire (38 victories), Col. McDonald (27 victories), Danny Roberts (15 victories)





and many others.

Yet a price was paid. There were so many ways to lose; late pull-ups on bombing and strafing runs, mid-air collisions, ship and ground fire, bad weather and engine failure.

Sometimes a new pilot was lost before he knew why he was there. Older ones went too; Capt. Condon was killed just as he became an ace. "Blood and Guts" Summer (10 victories) then took command of the 342nd.

The close calls were routine, like Col. McDonald landing with the windscreen covered with oil and the aircraft riddled, Joe Forester flying umteen miles on a single engine, and "Pee Wee" Dahl bailing out over Ormar Bay.

To ease the tension, there were marathon poker games, with Tommy McGuire shooting the works be it Guilders, Pesos or Gold. McDonald played as cool as he flew. Beer and liquor saved up from combat rations and later brought from Manila in five-gallon gas cans, would either produce a song fest or the horny ones would head for the village. Volley ball on the beaches and swimming in the bay, and, of course, the

unforgettable rest leaves in Australia.

Water, water, water. To help cope with it, Col. Charles Lindbergh flew with our group and gave the pilots pointers on fuel consumption. By reducing rpm to 1600 and boosting manifold pressure, the range was increased several hundred miles. On one flight from Monkner Airstrip, Biak Island to the Island of Ceram, several enemy aircraft were encountered. Col. McDonald, the flight leader, shot down one Zero, and Col. Lindbergh destroyed another.

In late October 1944, Satan's Angels departed the white coral beaches of Biak and headed across the vast Pacific. Destination, Leyte, P. I. Hours later the tranquility of the dark blue ocean and cloudless sky was broken as a blur of land appeared on the horizon.

As we approached Surigao Strait the sky was darkened by columns of angry black smoke, and a line of burning ships led to that flaming holocaust, Leyte Gulf. The air was filled with gyrating Japanese and American planes. Far below wicked orange-white flashes belched from our naval ships as they tried to bring down the flaming grey-green Zeroes

that were making Kamikaze attacks. Crippled American planes limped into Tacloban Airstrip for fuel and repairs. Enraged Naval pilots, whose carrier's had been damaged, were using it also. One Navy lieutenant was utilizing two planes, flying one while the other was being refueled. However, in the confusion he was shot down by our own ships.

Next came Dulag where the ground forces had carved a strip out of the dense jungle and laid a pierced steel mat for our runway. Our pilots lived in soggy tents that were surrounded by seas of mud. They slept on cots draped with netting to keep the vicious mosquitoes from getting at them.

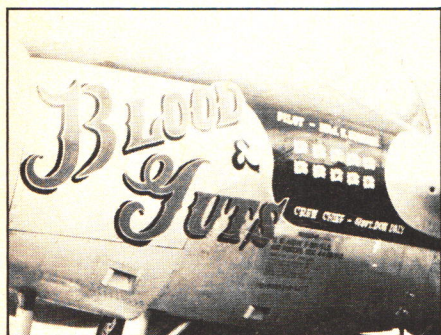
The mess hall was a drab olive-green tent. Its only happy diners were hordes of giant green flies that fought over the powdered eggs and peanut butter sandwiches. Coffee was served in those damnable canteen cups that stayed hot until the coffee was cold. Drinking water was scarce and reeked with chlorine.

Our pilots had regular attacks of Malaria, and the crud made them walk like Texas cowboys. They were subjected to daily strafing attacks





Members of the 432nd Fighter Squadron, "Satan's Angels, pose for this snapshot near Monkner Airstrip, Biak Island.



P-38 Lightning "Blood & Guts," piloted by Major E. Summer with tenth kill marking painted on the fuselage, just before he took command of the 432nd.

and had to fly in violent weather with inadequate radio aids.

It was at Dulag that a burning Betty Bomber tried to wipe out a row of P-38s parked near the runway. It missed and went sliding down the runway. When the plane stopped, little men in black suits jumped out and ran into the jungle. Another time Japanese soldiers slipped into the parking revetments and placed explosives under the wings of the parked aircraft, damaging several severely.

While covering a troop landing at Ormac Bay, Leyte, on December 7, 1944, the 475th shot down 28 enemy planes. Col. McDonald was responsible for three of them. However, we lost Col. Smith and P. J. Dahl. But P. J., although badly burned, had bailed out and was rescued by Philippine guerrilla's. He walked into camp two weeks later with a monkey on his shoulders.

While based at Mindora P. I., Satan's Angels lost their leading fighter ace, Major Tommy McGuire. On January 7, 1945, he was leading a flight of four over Los Negros Island when a lone Zero was sighted

slightly ahead and below them. McGuire signaled for trail formation and prepared to attack. But what looked like a piece of cake turned into a nightmare.

In a flash one P-38 was shot down and the Zero was on the tail of another. Major McGuire, in a desperate effort to save his friend, stalled out in a tight turn and crashed in a sheet of flame. Later the pilot was identified as Shoichi Sugita, one of Japan's greatest fighter pilots. Nevertheless, it wasn't Sugita that brought McGuire down, but the fact he'd violated three important rules of aerial combat against the Japanese. Flying too low, too slow (below 300 mph) and turning with his drop tanks on.

After countless strafing, fire bombing and escort missions, we secured Clark Field near Manila. Later from Linguiyan Gulf we flew strafing and bombing missions to Formosa and French Indochina. The pilots appreciated the twin engines on these long dangerous overwater flights. Indeed the times we returned home on a single engine are legendary. Others weren't so lucky. On one flight a

pilot radioed that he was ditching because his engine was hit.

"Feather it up," someone said.

"Feather it up, hell!" he replied. "I'm in a P-51!"

One of the 475th's longest flights was on 29 March 1945, from Linguiyan Gulf to Cape Batangan French Indochina. It was a beautiful sight as the three squadrons formed and set course across the South China Sea. Power was reduced, mixture leaned, because, in addition to navigating 1600 miles over water, we had to find and destroy a large convoy.

Hours later the Indochina coast rose out of the glimmering sea. We were right on target. Far below, the water was covered with Japanese ships. We dropped our wing tanks and turned on the gun sight, an orange ring circling a dot. Then in trail we descended like a giant snake weaving through the towering cumulus clouds. Suddenly the air filled with bandits. Half of the group tangled with the enemy planes while others strafed the convoy. We fought until our diminishing fuel supply forced us to break off and head home.

After landing, one pilot learned that his closest friend had crashed on the beach. Thinking he might rescue him he took off during the night and returned to Cape Batangan. At dawn a search flight met him coming back alone.

In a few months it was over. Some P-38s were given to the Chinese Nationalist Air Force. Others were bulldozed into piles and sold to scrap dealers. A few lucky ones were bought by civilian firms for aerial survey or P-38 lovers who used them for racing and air shows.

Some day in the far off Southwest Pacific, as the first light pushes away the darkness, Satan's Angels will again flash down the steel matted runways. After a gentle bump the gear will be tucked away and the powerful Lightnings will streak heavenward with their bright red, yellow and blue spinners glistening in the early light.

The group is formed. The roll is called. They climb until the coral beach is only a thin white line between the dark rain forest and the blue-green ocean, finally as their contrails disappear into the azure sky for their final flight, the radio crackles, a fighter pilot song is heard:

From Nadzab to Rabaul, where ever the Rangoon flows, the Tony's a bastard, a worrisome thing that causes us to sing, the New Guinea Blues.

Mike Dowler  
Hickory Ridge, Arkansas

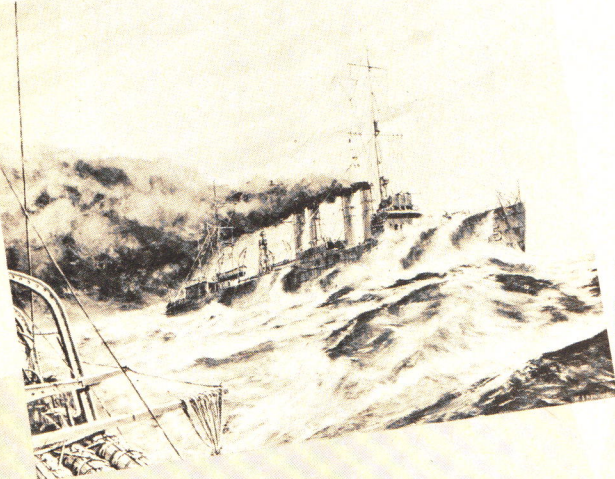


# Ship Classics

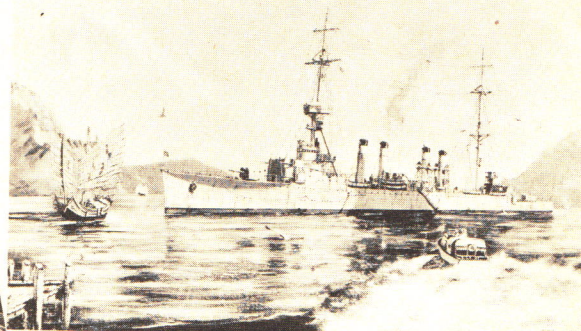
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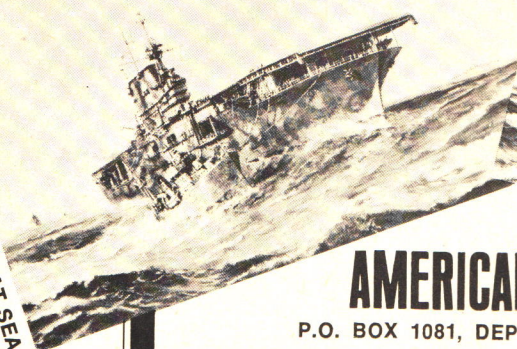
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**D**URING WORLD WAR II, the Netherlands was for military aircraft, enemy and Allied alike, what the Sargasso Sea was like for sailing ships in centuries past.

The statistics which tally the number of aircraft shot down or lost over the Netherlands are staggering. Royal Netherlands Air Force historians and official U.S.A.A.F. and R.A.F. combat reports show that during the five year period between 1940 and 1945, more than 7,000 aircraft crashed in Holland. This number includes more than 3000 aircraft belonging to the R.A.F. and Commonwealth Air Forces, 1,200 of the U.S.A.A.F., and 2,500 belonging to the Luftwaffe.

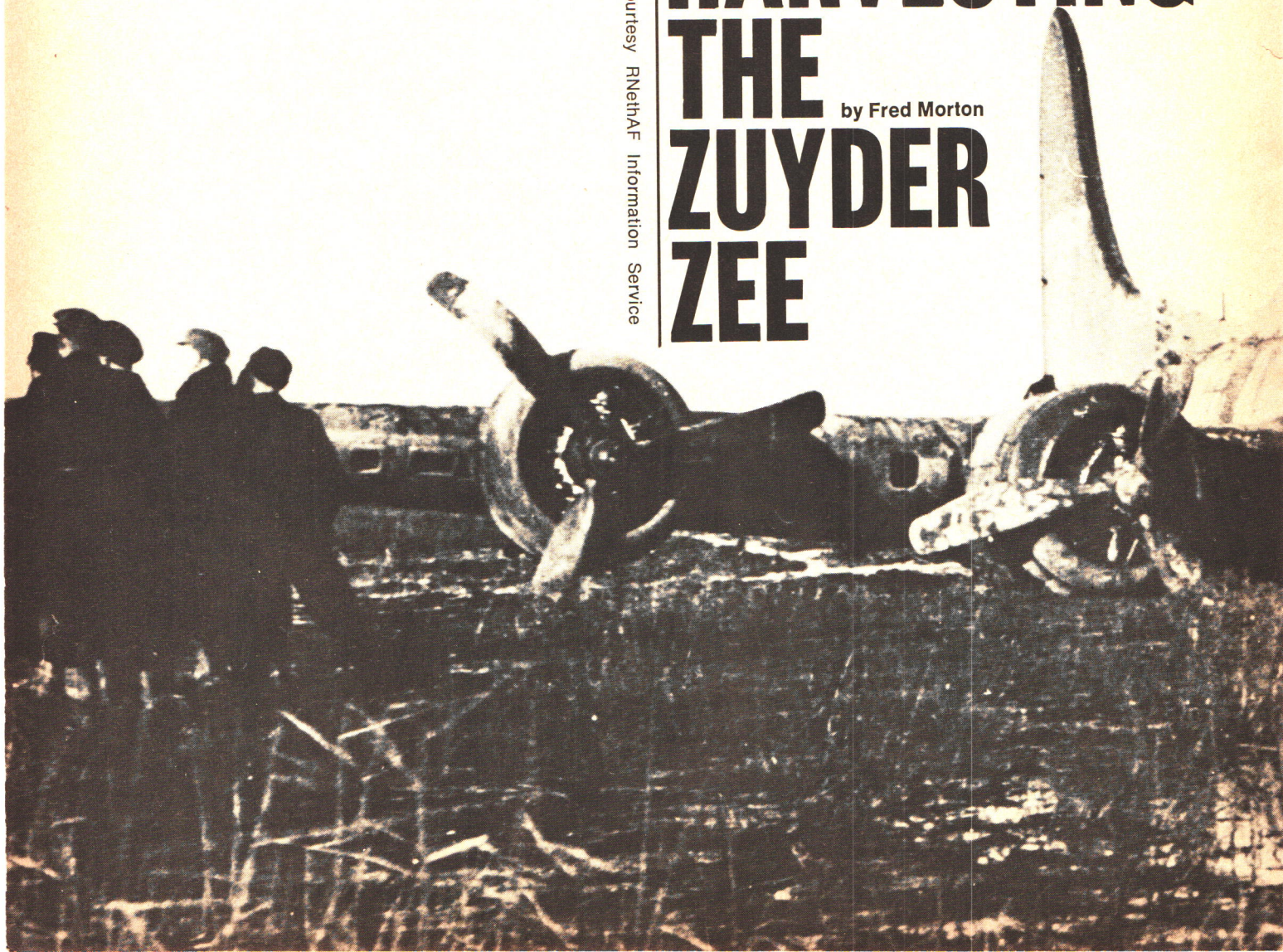
It has been estimated that the total number of enemy and Allied aircraft shot down in the European Theatre of Operations during World War II amounted to somewhere between 30,000 and 40,000; it is no drain on anyone's mathematical skills to work out that a very significant percentage

Air strategy during WW II often demanded that the vast aerial armadas of the American and British Forces fly a direct route across Holland on their way to pound German industrial complexes. The tiny country of Holland became a veritable junkyard as thousands of aircraft, British, American and German, fell from the sky after the vicious air battles that ensued in this area. Between 700 and 1200 aircraft crashed into the Zuyder Zee. Today, in "Operation Harvest," the Royal Netherlands Air Force is salvaging these fallen aircraft from the muddy bottom of the IJsselmeer.

# HARVESTING THE ZUYDER ZEE

by Fred Morton

Photos courtesy RNeHAF Information Service





of these aircraft were lost over Holland.

A confrontation with these startling figures usually gives rise to a fairly natural question—"How is this possible?" Holland for instance was not involved in major battles either on land or in the air until well after the Normandy Invasion.

The answer for a major part lies in the battle records of hundreds of Allied fighter and bomber units, as well as those of their Luftwaffe adversaries, who were thrown against each other, day and night, as the Battle for Germany gained momentum. As the R.A.F. and the U.S.A.A.F. pounded away at German industry with a mighty two-fisted air offensive, most of this aerial traffic was directed over Holland.

Here is a typical day's traffic near the end of the war:

On the 19th of February 1945, the U.S.A.A.F. launched one of its massed raids in an all-out attack on the German aircraft industry. Sixteen

U.S.A.A.F. fighter groups comprising Mustangs, Lightnings, Thunderbolts, and 14 Spitfire Squadrons of the R.A.F. escorted 16 Eighth Air Force Bomber Wings consisting of Flying Fortresses and Liberators. The total number of aircraft involved in this operation amounted to more than 941 bombers and 700 fighters.

Before this daylight raid got under way, the last of 700 British R.A.F. heavy bombers — Lancasters, Stirlings and Halifaxes—had returned to their base after a big night raid on Leipzig. Add to these vast aerial armadas the Luftwaffe opposition put up into the sky as defense. You would find that there were more than 3000 aircraft in the sky during an eight-hour period, most of them flying over or near Holland.

Or another example, the first heavy bomber attack on Hamburg on the night of 24-25 July, 1943. This was when the R.A.F. sent over 791 bombers which included 347 Lancasters, 246 Halifaxes, 125 Stirlings and 73

The project to drain the vast Zuyder Zee in the Netherlands has uncovered more than valuable farm land. Receding waters have exposed this U.S. 8th Air Force B-17G Fortress which crashed on February 10, 1944. B-17G serial numbered 237950, nicknamed "Dinah Might," belonged to 452nd Bombardment Group, 45th Combat Wing, Station Deepham Green, England, and was shot down when returning from a raid on Brunswick, Germany. Three of her crewmen were taken prisoner by German occupation troops while seven others escaped and were brought to safety by the Dutch Underground Escape Organization.





Wellingtons. This force flew directly across Holland.

The toll of aircraft brought down in either air-to-air combat, in collision, or as a result of ground flak, left a devastated path of aircraft wreckage along the bomber attack route, which stretched across Belgium, Luxembourg, France and Holland.

For aircraft shot down in the occupied countries or in Germany, there was a reasonably expected fate ahead of them. Anything that could be stripped—instruments, weapons, engine parts, airframe components—was cannibalized and used again in the aircraft of the Luftwaffe. Anything that could not be used immediately was melted down and used in some way or another—nothing was left as scrap.

From the point of view of the military historian, this was an unsatisfactory state of affairs, since no relics were left to tell of the battles that had taken place in the skies above. But the situation in Holland was different. From this point of view one tenth of the land surface of this tiny country was taken up by an inland sea, the Zuyder Zee (or IJsselmeer as it is called today). It is this inland sea which has become at one and the same time a cemetery and a museum for crashed German and Allied aircraft.

As the waters of the IJsselmeer are now being pumped out into the North Sea through a feat of outstanding hydraulic engineering, to gain valuable farm land (the Dutch polders), the remains of crashed aircraft in various states of preservation are being brought to the surface.

About 95 percent of these aircraft disintegrated completely as soon as they hit the icy waters, but there are a few who were ditched in a comparatively gentle fashion and that bear, on recovery, some resemblance to their original aircraft form.

More poignantly, the remains of aircrew who flew the aircraft are recovered too and it is in this regard that Dutch salvage experts, a type of a medical archaeologist, using a wide range of skills, intuition and the deductive reasoning of a Sherlock Holmes, identify aircrew members using little more than a set of toe bones, a skull, or the rusted parts of a watch still being worn on the skeletal remains of a flier's wrist.

Holland was probably for combat airmen what the front line was to infantrymen. It was across the Dutch coast that bomber streams first entered enemy territory. For an attack on the German industrial Ruhr, the bomber streams were directed across the south of Holland, above cities like The Hague and Dordrecht. For

attacks on northern Germany the bombers flew above Holland in a vertical line.

The Germans were quick to mount thick air defenses around Holland. The whole coastline of the country became a veritable wall of flak and searchlight batteries. This was one counter against the increasing night raids.

In the daytime, highly experienced Luftwaffe Fighter Gruppen tackled American bomber units as they crossed the Dutch coast, with rockets, air-to-air bombing, and cable-towed bombs.

The obvious aim of attacking the bomber streams as they crossed the Dutch coast was, for the Luftwaffe, the carrying out of an age-old adage of taking the fight to the enemy before he could bring it to their own backyard.

However, there was one area in Holland—a sort of "No Man's Land"—that the attacking forces headed to after they had managed to shake off fighter opposition. This was the huge inland sea. Here there were no anti-aircraft batteries, no searchlight concentrations. As a result, flight plans frequently set a course across the Zuyder Zee.

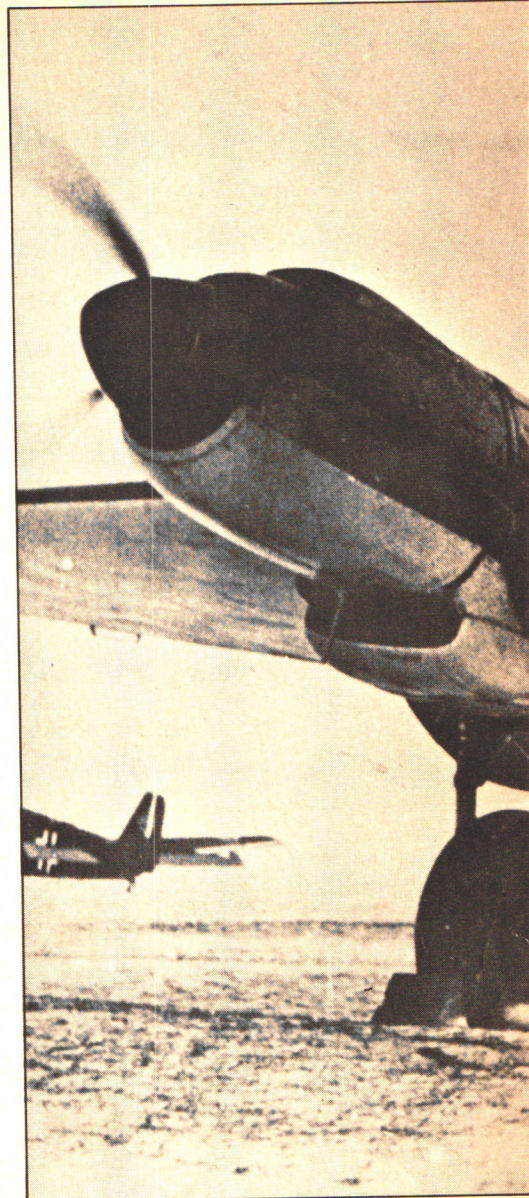
The German defense organization reacted by stationing mobile ship-mounted flak batteries and searchlight units that could position themselves easily below the bomber streams across the vast sea. They could mount a coordinated defense, no matter what heading the bomber stream was taking.

More than this, the need for adequate German night fighter defense in the Zuyder Zee area gave sufficient push to the immediate build-up of a Luftwaffe night fighter capability.

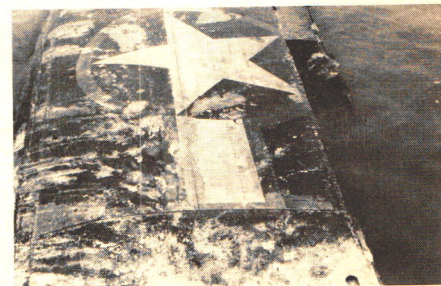
Selected veteran Luftwaffe pilots flying radio directed ME 109s guided by Wurzburg "A" sets, twin-engined radar controlled Me 110s easily recognized as night fighters because of their antler-like Lichtenstein antennas protruding from the nose of the aircraft, and heavily armed, rocket firing FW190s of famed "Wilde Sau" night fighter units, were sent into the attack.

Allied aircraft were up against such night fighter aces as Captain Streib, Commander of the 1/NJG, First Lieutenant "Bubi" Lent of 6/NG, and First Lieutenant Egmont, Prince of Lippe Weisenfeld. These were all picked men and the Gruppen to which they belonged grew in confidence and night fighting skills as night after night scores of bombers were shot down into the Zuyder Zee.

One significant factor in the Luftwaffe night fighter operation was that the night fighter stations were

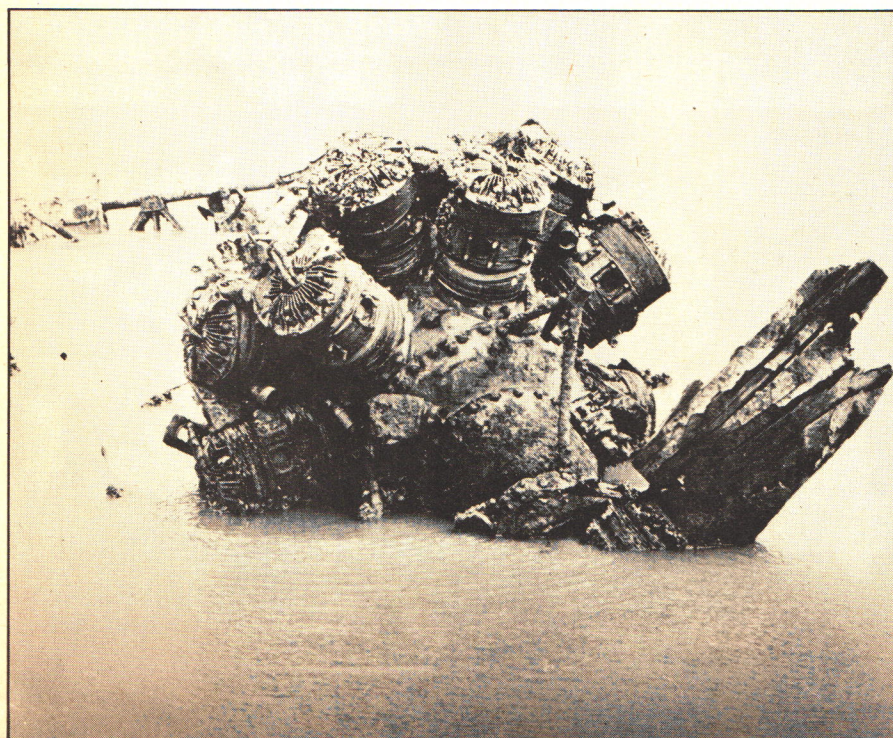
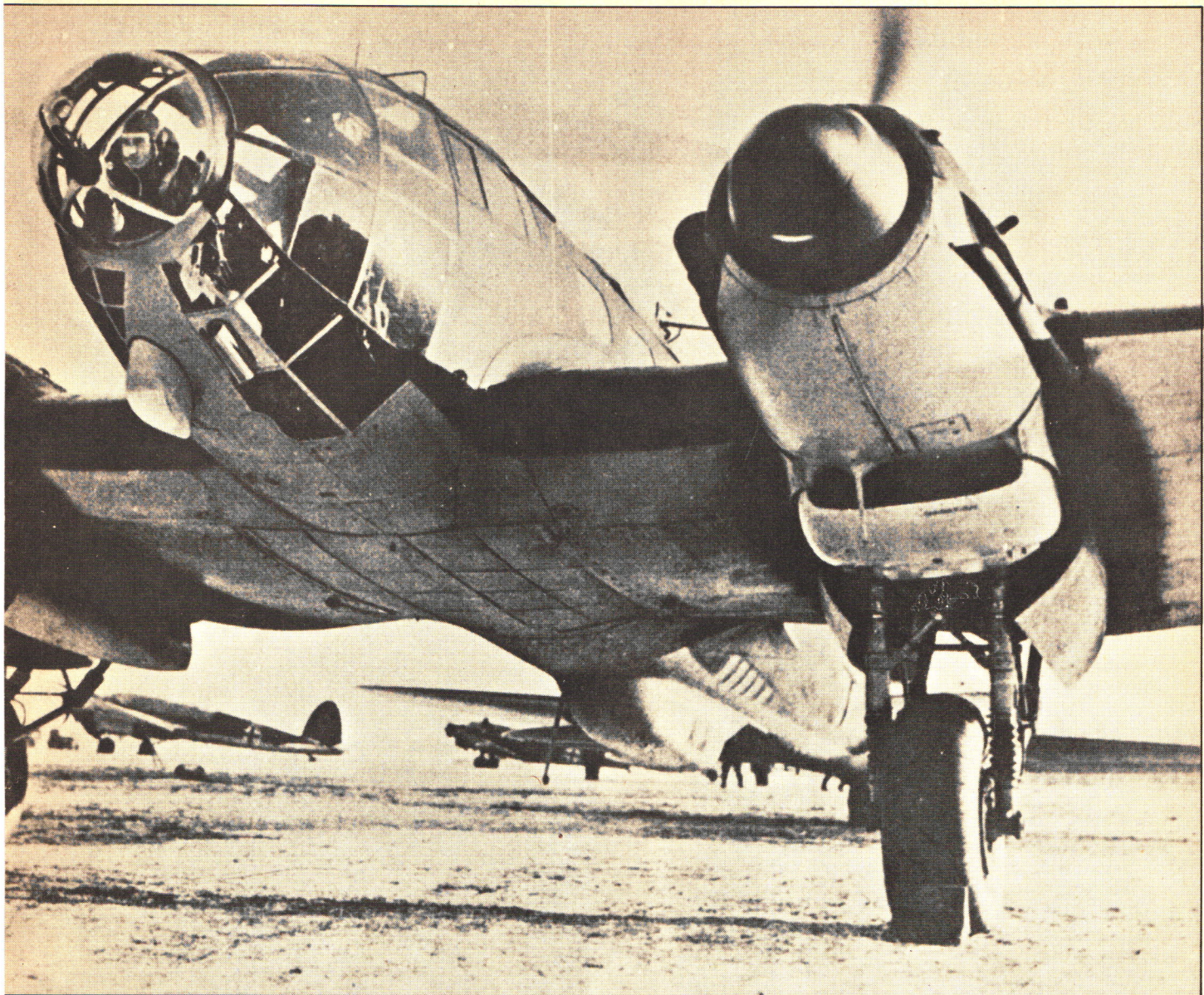


A large number of Luftwaffe aircraft such as this Heinkel fought above and crashed into the Zuyder Zee. Their wreckage now being brought to the surface is mute but dramatic testimony to the violent air battles that often took place over this zone.



Markings from this B-24 Liberator bomber wing section dredged from the Zuyder Zee will become the task of "Operation Harvest" personnel who will trace the unit's history and her crew. Other parts, such as radio equipment, machine guns, oxygen bottles, are made available to such museums as the R.A.F. Museum at Hendon, the U.S. Air Force Museum at Wright-Patterson Air Force Base, Ohio, and the German Luftwaffe museum at Uetersen Air Base near Hamburg.





During the final stage of draining dry a new polder from the Zuyder Zee, the virgin sea bottom displays several hundred ship and aircraft wrecks such as this wrecked British Vickers Wellington bomber (geodetic construction) which was found on the northern edge of the 1959 reclaimed polder Eastern Flevoland.

The 14-cylinder Bristol Hercules port motor is an engine relic from the same Wellington. The starboard motor is in the background. In identifying aircraft, R.N.A.F. experts send what engine registration numbers and markings they can find to the original engine manufacturers. From there they can easily obtain details of the squadron service of the aircraft.



positioned around the Zuyder Zee in towns called Leeuwarden, Deelen and Zeist.

Old-timers still living in these towns recall the darkness of the night punctured brilliantly as a British heavy fell to the guns of a German night fighter and started its long spiral descent into the icy waters of the sea. A few minutes later the same scene again, and then again. As many as 20 in an hour, say some of the polder dwellers.

The wreckage of those aircraft, along with more than a thousand others, remained undetected for more than 25 years. Credit to their original discovery goes to Dutch fishermen netting eels in the IJsselmeer. A net becomes snagged on a submerged object. When they bring it to the surface it turns out to be the barrel of a Browning 303 machine gun from the nose turret of a Flying Fortress. Another fisherman finds a pair of fur-lined flying boots in his catch.

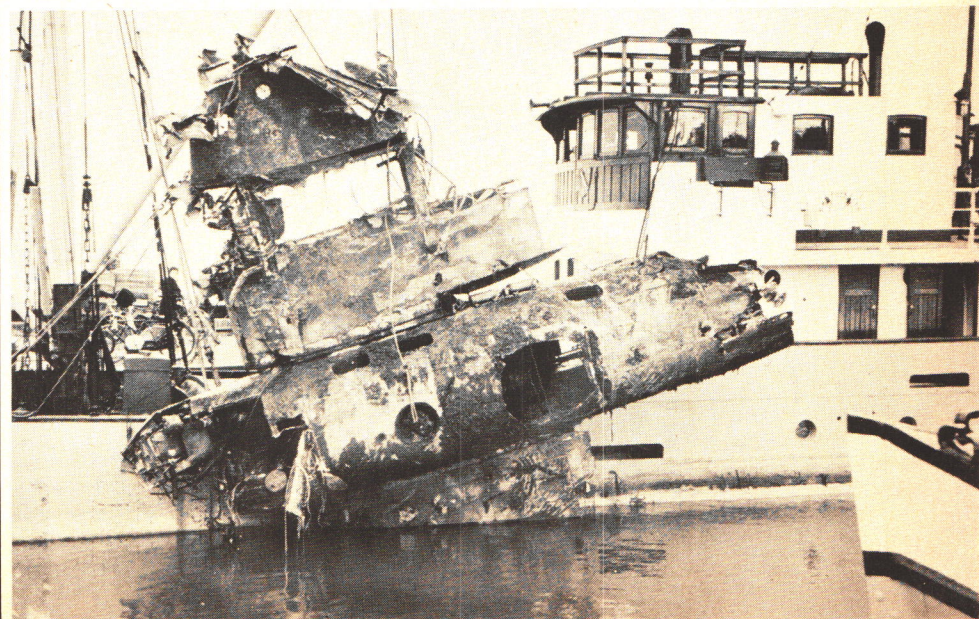
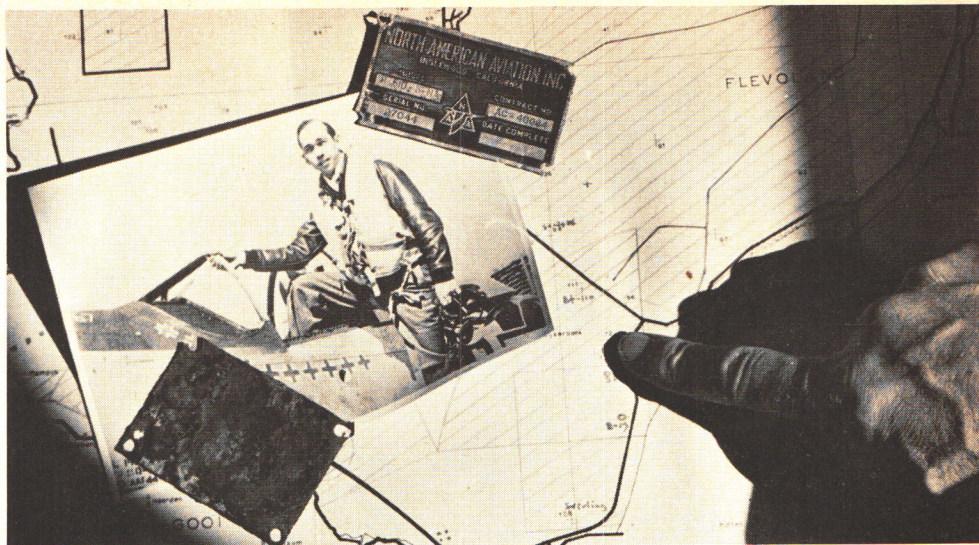
The number of reported snaggings increased so much that the Dutch authorities (the Waterstaat) became involved in the snaggings. It was this body which had to decide whether the fishermen were to be paid compensation for damaged nets since the Dutch government is responsible for keeping inland and coastal waterways clear.

Each wreckage report had to be investigated thoroughly to establish the authenticity of the claim for compensation. It was at this point that the Royal Netherlands Air Force was brought into operation. Aircraft had to be identified, cleared of ammunition, and bomb loads defused. This was a particularly dangerous and sensitive phase of the operation, since bombs and their fuse mechanisms are still hot after 25 years under the water.

At this stage, cooperation between Air Force authorities in Germany, Britain and the United States helped in identifying the aircraft and established through official combat and armament reports the type of bomb load being carried.

The salvage work was carried out in conjunction with the Dutch Waterstaat salvage ship, the *Poolster*. In the early days of "Operation Harvest," as the recovery project is termed, the salvaged aircraft were taken to the Dutch Air Force base at Gilzerijen (ironically enough a World War II Luftwaffe fighter base) and then sold for scrap.

Now, as the interest in World War II history is growing and, in particular, aviation combat history, aircraft remains of interest are kept as museum pieces.





This Mustang pilot crashed into the Zuyder Zee when his aircraft collided with another P-51. The pilot of this aircraft bailed out and was taken prisoner. The second aircraft disappeared into the mist above the inland sea with no further trace of it recorded until recently when it was found as sea waters were drained. So far only a shoe of the pilot has been found, but R.N.A.F. research workers are alert to any possible clues which might reveal what happened to the downed pilot. The finger points to where the Mustang wreckage was found.

Aircraft wreckage, such as these remains of a Liberator, are detected as the waters of the inland sea recede. What was once a vast shallow sea will become farmland and perhaps "Operation Harvest" will someday produce a reasonably well-preserved bomber.



A night raid on Cologne or a massed day raid on Berlin took airmen and their aircraft across the Netherlands. A violent air battle could lead to a final agonizing spiral into the Zuyder Zee. Depending on the angle of impact, the aircraft could belly in and sink to the bottom in an almost preserved form, or be smashed almost beyond recognition as soon as it hit the water. Weapons, tires, oxygen tanks, pieces of chewing gum and personal papers all help to make positive identification out of a heap of rubble that was once a highly tuned fighting aircraft.

The salvage ship *POOLSTER* is often called upon to recover objects, such as this Luftwaffe Heinkel bomber, before sea waters are drained. In this case, a Dutch fisherman, netting eels in the Zuyder Zee, got his nets entangled on the object lying fifteen feet on the bottom of the sea floor and the salvage ship was called in.

Each salvage project is recorded with as much detail as possible. Nothing is overlooked and all effort is made to establish the identification of the aircraft type, its squadron history, armament and bomb load, engine details, final combat report and crew information.

Take the case of salvage report No. 78 as an example. This resulted in the wreckage of a strange looking, yellow colored aircraft being brought to the surface. This was in the summer of 1953. When Dutch salvage experts examined it they found it carried distinct Luftwaffe markings, but the engine numbers were written in Russian Cyrillic figures. Further examination revealed that it was a Russian twin-engined light bomber — a Tupolev SB — 2 Anuscha.

The Germans had captured a number of these on the Russian front during 1941 and pressed them into service with the Luftwaffe. They were used for target towing or as training aircraft. But the question of how it was shot down has never been answered. Was it the victim of an intruding Spitfire? Was it shot down in error by ground fire? Perhaps it had engine failure. So far the experts have not been able to find the answer.

Many Junkers 88s, in their night fighter configuration, a good indication of the night fighter activity over the Zuyder Zee, have been found. One interesting aircraft type salvaged was an ME 262 jet fighter (salvage project number 36) which was probably shot down during the last few days of the war since its Junkers motors carried a registration date, 21 November, 1944.

This jet fighter could have been flown by a member of the first true Luftwaffe jet fighter unit, the Kommando Nowotny (named after its leader Major Walter Nowotny, a distinguished fighter ace reported to have shot down more than 258 aircraft) which often tangled with Eighth Air Force bomber and fighter groups above the Zuyder Zee.

Another Luftwaffe aircraft brought to the surface gave evidence of a little-known sidelight of the activities of German mystery aircraft during the war. After R.N.A.F. frogmen had made their examination and the *Poolster* had dragged the wreckage 15 feet up from the murky, muddy bottom, to everyone's surprise the find turned out to be the almost perfectly kept fuselage of a "Mosquito" fighter/bomber.

But there was not the slightest trace of identification. The aircraft carried normal British-type camouflage but was equipped with German

machine guns and cannon.

Later research showed that the "Mossie" had been used by the highly secret Luftwaffe "Kameschwader" 200, which had cunningly used Allied aircraft for espionage and decoy work. How it was shot down or what mission it was on will never be known.

Probably the strangest of all Luftwaffe finds (although not strictly Luftwaffe, since the salvaged aircraft dated back to World War I) was the remains of a large Gotha IV Bomber.

As the waters of the inland sea gave way to arable polder land, R.N.A.F. experts were surprised to see what looked like on first examination, a pair of big bicycle wheels. But they were not. They were part of the undercarriage of a Gotha Bomber which crashed into the sea on October 13, 1917. It reappeared 47 years later when this part of the lake was pumped dry. How the giant Gotha came to be in Holland, a neutral country, during World War I, is anybody's guess.

The list of salvaged American aircraft, most of them belonging to Eighth Air Force bomber and fighter units, is impressive. Most of the aircraft types salvaged so far included Fortresses and Liberators, Mustangs, Thunderbolts and Lightnings.

Curiously enough, very few if any medium bomber types have been brought to the surface.

The typical Fortress discoveries are listed as salvage projects No. 119 and 120. The first of these two was found in a sandy shallow in the center of the sea. There was no problem about identifying the wreckage since the complete fin and rudder were brought ashore, bearing a large black letter "C" on a yellow and white triangle with the aircraft's serial number written beneath it.

This Fortress carried the serial number 42-37719 and belonged to 533 Squadron, 381 Bomb Group, and was one of 60 bombers lost during raids against Halberstadt and Brunswick on January 11, 1944.

As R. N. A. F. excavators searched through the mud and reeds (excavation here means pick and shovel work since a bulldozer would bog down in the thick mud of the polder surface) other parts of the Fortress were found: a ball turret, a number of boots and shoes, two radio sets bearing both United States and British Air Ministry nameplates.

In the case of the second Flying Fortress, identification has not been so easy. This was discovered on the west coast of the Zuyder Zee. The first items brought ashore included the nose section, an Alcad 24 structure with perspex transparencies, still

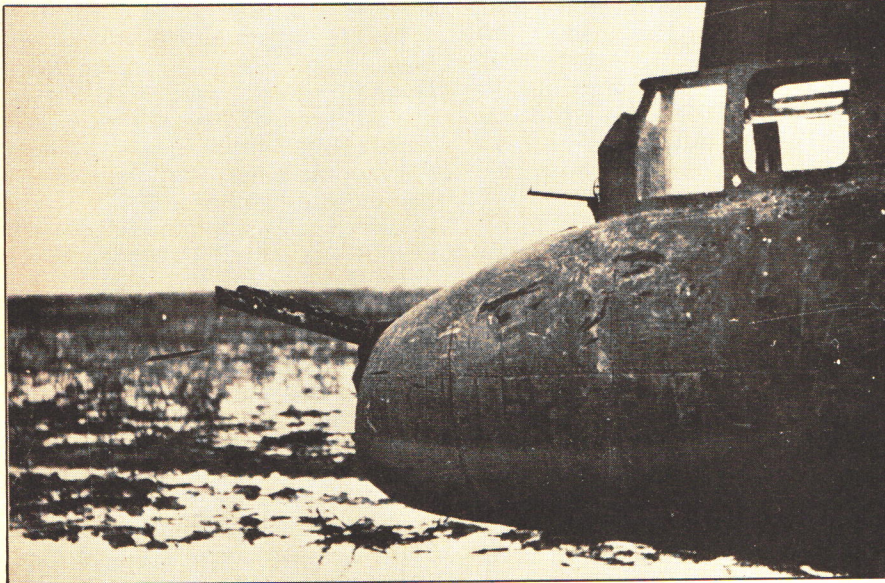


with its .50 caliber guns and more than 1000 rounds of ammunition dated 1943, in containers.

There was also a bin filled with a mass of small aluminum strips, "chaff" used for radar jamming.

There was quite a variety of personal equipment brought ashore as well. There were partly filled oxygen bottles and navigators' and bombardiers' outfits, circular slide rules, star charts for astro-navigation, dividers and bomb release computers.

A pair of twin Browning .50s on the rear of a salvaged Flying Fortress. The small machine gun object poking out of the top of the rear turret is the linked machine gun sighting arrangement which was standard equipment on early B-17s.



Dutch Air Force personnel and civilians on "Operation Harvest" are aviation fanatics. Very often the recovery of an aircraft means many hours of exposure to the icy winds and waters of the IJsselmeer. But here is satisfaction as the aircraft wreckage is brought onto dry land as in the case of this Junkers 88.

The grey-green camouflaged skin had a large number of bullet perforations, but there was no trace of engine numbers or airframe registration markings to base any positive identification on.

But there were eyewitness accounts to go on. Fishermen remembered seeing the Fortress crash at exactly the same spot where the wreckage was found. There were eight parachutes they remembered seeing appear before the Fort went into its final spin. All eight crew members survived and were taken

prisoner by the Germans. They even remembered the date of the crash—it was the 29th of June, 1944.

According to the fishermen's recollections of the battle of the day, 800 United States bombers crossed the Zuyder Zee on a westerly heading. One of the last Forts to cross was attacked by German fighters and became uncontrollable. Eight crew members bailed out.

This account ties in with official records which show on June 29, 1944, about 1000 B-17's and B-24's attacked targets in Bohlen, Leipzig and Fallersleben with a loss of 15 bombers and 2 fighters.

The question now confronting R.N.A.F. salvage experts is which one of the 15 bombers is the one they have scraped up from the bottom of the sea and what happened to the two remaining crew members?

British R.A.F. heavy bombers are brought to the surface with amazing regularity. R.A.F. bombers were flying across Holland as early as 1940 and the "1000 Bomber" raids that were subsequently launched against the German Ruhr made a very significant contribution to the aircraft wreckage that lies at the bottom of the Zuyder Zee.

The files of R.A.F. Bomber Command show that at least 27 Lancasters, 18 Stirlings and 17 Halifaxes are among the roll call of heavies which have crashed into the inland sea. These figures suggest that many more aircraft, unaccounted for, lie beneath the murky waters of the Zuyder Zee.

The identification of aircraft is often a laborious process. Take the case of Stirling Mark I BF 383. This was located in the IJsselmeer on November 6, 1965. After the *Poolster* had brought the wreckage to the surface, an inventory was made of what had been found: three Bristol Hercules radial engines, the rear part of a big fuselage, some fragments of a wing, 700 rounds of .30 caliber ammunition and a number of small airframe parts.

Identifying the aircraft was no problem. The double tail wheel clearly demonstrated that the aircraft was a Stirling. There was a plate engraved in the fuselage with the number S 29, the manufacturer's type number together with drawings, part and issue numbers. All of the engine numbers were legible, one of them being AM 22 32 32/AC55685.

Among the Stirling relics was an Elsan aircraft toilet still in good condition. The serial number of the four-engined heavy, although partly overgrown with mussels, was easily distinguishable near the tail root.

(Text continued on page 74)



# SPITFIRE PORTFOLIO



A COLLECTION OF  
MISCELLANEOUS PHOTOS FROM  
OUR FILES THAT ILLUSTRATE ONE  
OF THE MOST PHOTOGENIC  
FIGHTING AND FLYING MACHINES  
EVER BUILT ON THIS 38TH  
ANNIVERSARY OF THE FLIGHT  
OF THE PROTOTYPE.



A) Dramatic view of a Spitfire Mk. IX that illustrates the classic lines of England's premier fighting aircraft. The Mk. IX was basically a hurriedly produced stop-gap to fight the Fw-190 menace. The Mk. IX consisted of a Mk. VC airframe adapted to take the 1,660 hp Merlin 61, many Mk. IXs were, in fact, conversions. The new engine resulted in a lengthening of the fuselage and an additional radiator was mounted under the port wing; this ended the asymmetry which had caused so much comment on the original prototype. This particular example was used in the movie, "Battle of Britain," and is now flying with the Confederate Air Force.

B) Perhaps the finest-looking propeller-driven fighter, the Supermarine Spitfire Mk. XIV. RB515 was one of only eight of the type to actually fly. (Supermarine)

C) T. Mk. IX on a test flight near the Supermarine factory. The two-seat trainer was produced in limited numbers after World War Two. The T. Mk. IX was used by a number of small air forces including Erie, which flew the type well into the 1960s before retiring the machines and surplusing them to the civilian market. Note that the forward cockpit has been moved forward about one foot. The significance of the 'N32' marking is not known. (Supermarine)

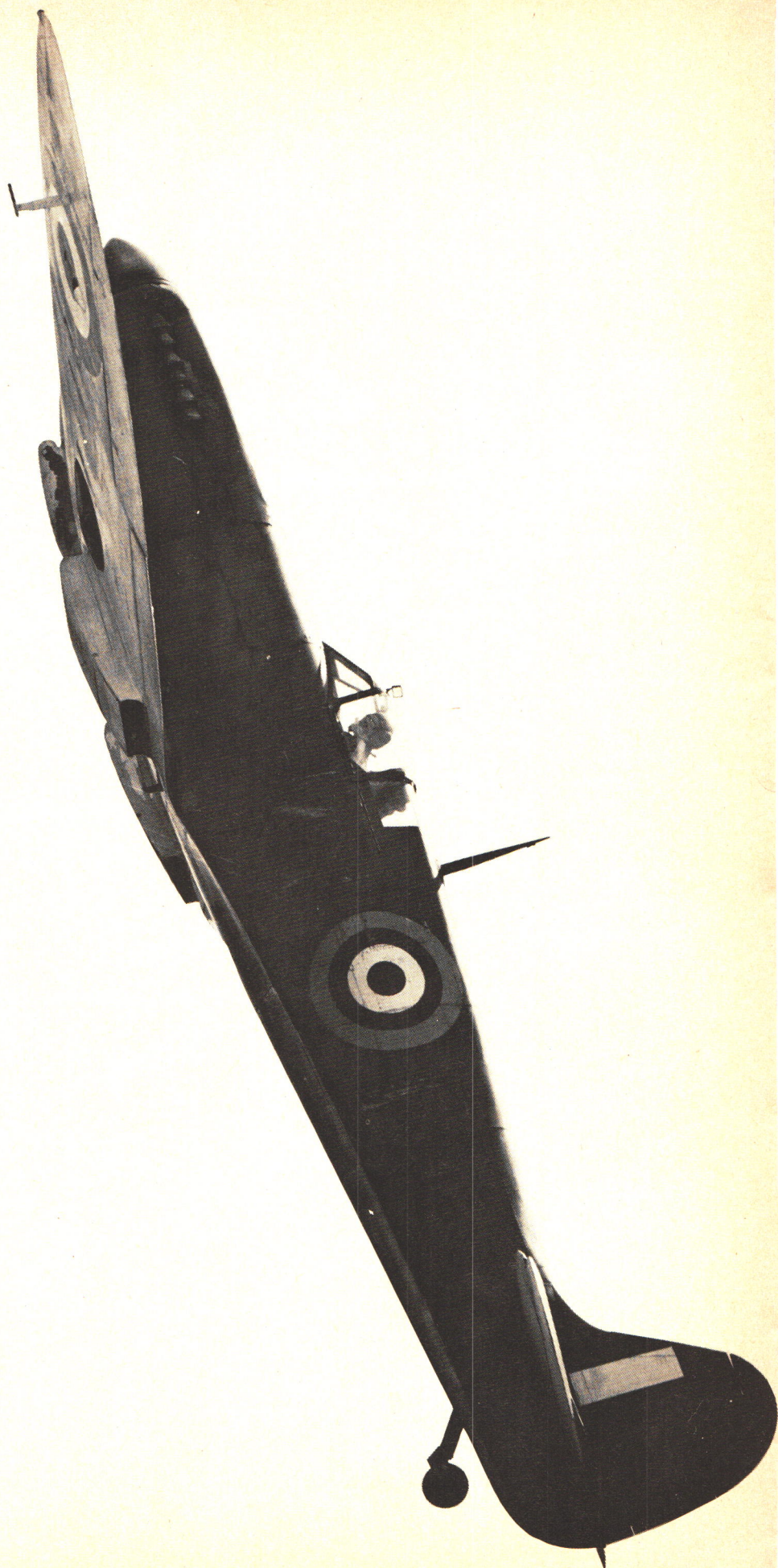
D) Unusual view of Spitfire Mk. XIV RM689, wearing pointed tips, and painted in rough camouflage for "Battle of Britain" filming. Believed to be the only Mk. XIV Spitfire currently flying, G-ALGT was built at Supermarine's Chattis Hall Works in 1944, its construction number being 6S432263, and it was handed over to the RAF on 3 July, becoming RM689 at No. 39MU, Colerne. It was flown at Wittering by the Air Fighting Development Unit to test a new wrap-around windshield, and then stored at 33MU, Lyneham until early 1945. It was transferred to Dunsfold for the 83 Group Support Unit. It joined No. 350 (Belgian) Squadron on 1 March, serving with the 2nd Tactical Air Force on the Continent, and received damage in early April, after which it was repaired and returned to Dunsfold, going back to 350 Squadron on 12 July. On 14 January 1946, RM689 was transferred to No. 443 (Canadian) Squadron serving with 144 Canadian Wing, still with the 2nd TAF, and coded '21.' After two months with this unit, it was returned to storage at 29 MU, High Ercall, and sold to the Ministry of Supply early in 1949, being registered to Rolls-Royce during February. It was used as a chase plane and high-speed taxi until recently when it was turned over to the RAF Historic Flight.

E) A Spitfire Mk. VB assigned to the Royal Navy as a Seafire IB. Apart from the arrestor hook and catapult spools, plus some local strengthening of the fuselage, the Seafire IB differed little from the Spitfire VB. Its wings did not fold and it could not be struck down below decks on the existing lifts of the navy's carriers. (Supermarine)

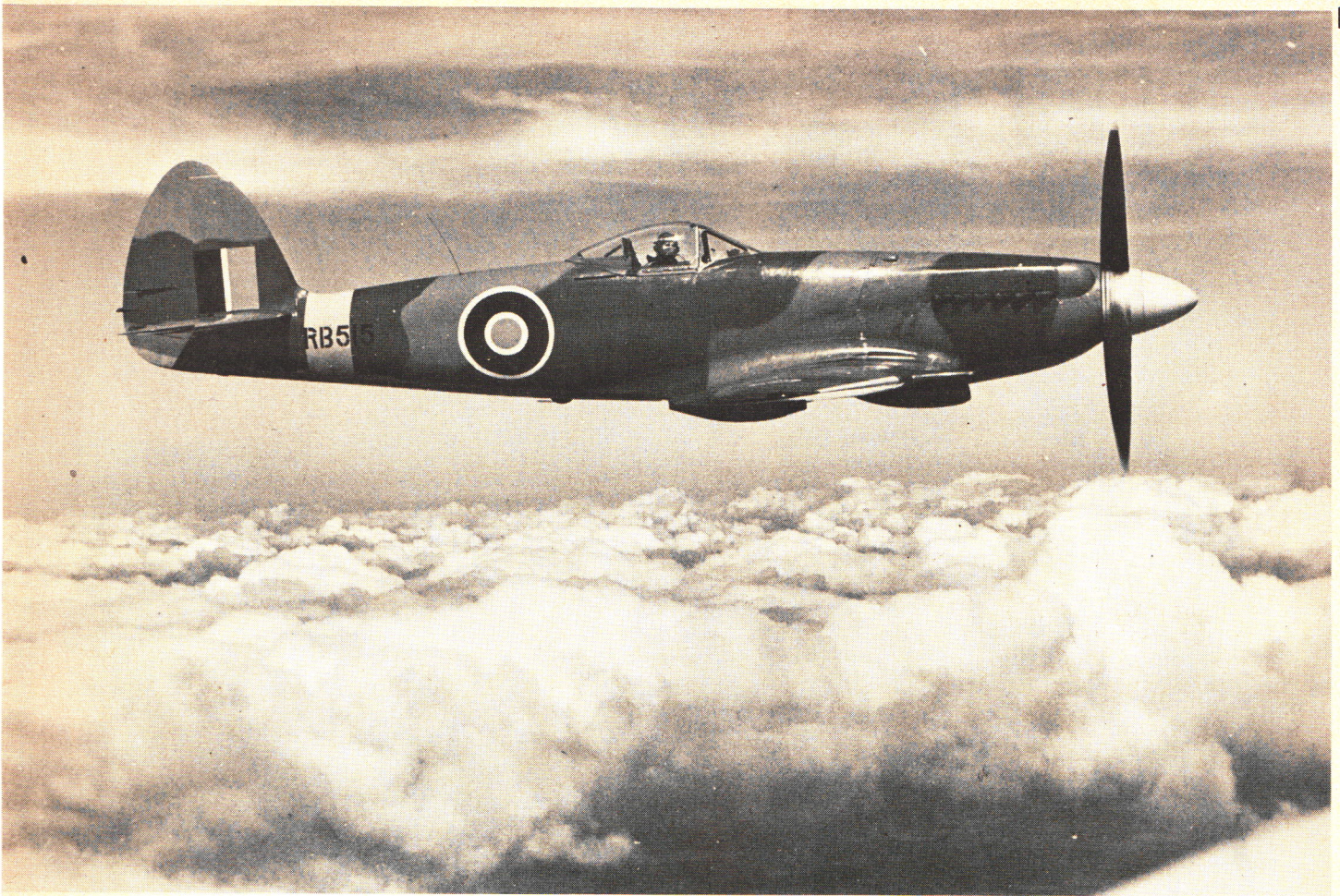
F) Two Spitfire Mk. 21s formate on a Spitfire FG Mk. 22. Some Mk. 22s had a 2,375 Griffon 65 engine, driving contra-rotating propellers, and later models had a completely redesigned tail unit. Spitfire Mk 22s formed the backbone of the Royal Auxiliary Air Force from 1946 to 1951 and also served with the Middle East Air Force. (Supermarine)

G) Never before published photo of two Supermarine Seafire FR 47s landing. The fighter recon aircraft was attached to the Royal Navy Volunteer Reserves and the craft in the foreground is serialised VP487 and coded 'BR/162.' Note the contra-rotating propellers. The photo was taken on 16 May 1953.

A







B



C

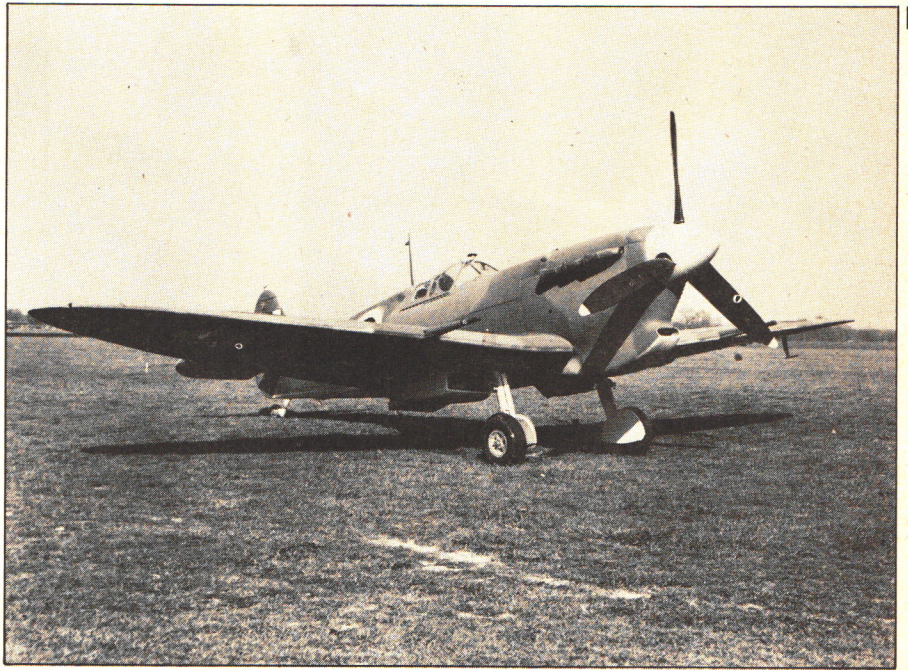


# SPITFIRE PORTFOLIO



D



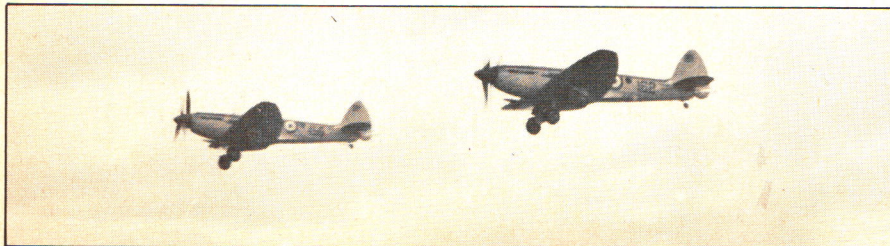


E



F

G

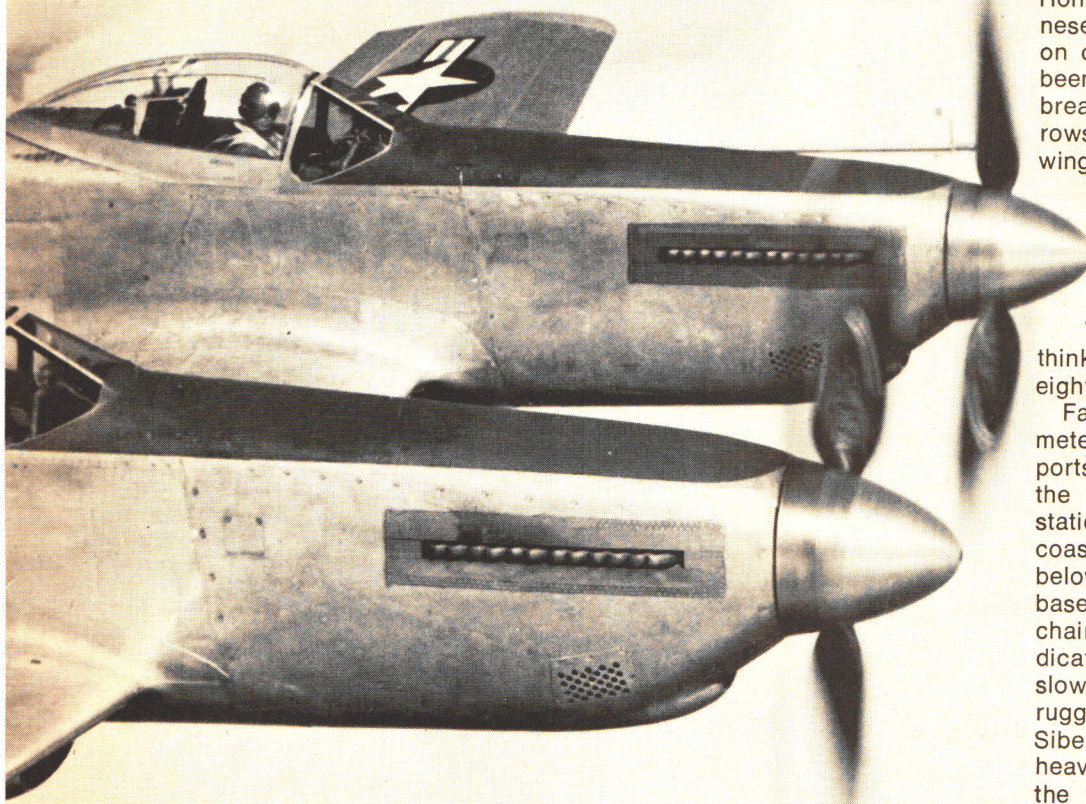




The second production P-82E, 46-256. This in-flight photograph shows the new forward fuselage configuration and multiple exhaust stacks perfectly. A support boom for test instruments is visible over the left-hand engine cowl. These booms normally mount pitch-and-yaw recording equipment.







# TWIN MUSTANG

by Robert Trimble

## PART II

**The F-82 is blooded in Korea, sent to Alaska for cold weather operations, and finally disposed of with little ceremony in this final segment of the Twin Mustang saga.**

Photos courtesy of North American, except where noted

**W**EEKENDS HOLD little attraction for military personnel assigned to the duty section: continual musters, boring watches, tedium relieved only by meals which consist of unidentifiable compounds ladled out by sweating mess cooks, no place to go but to quarters which reek of old floor polish and dirty clothing.

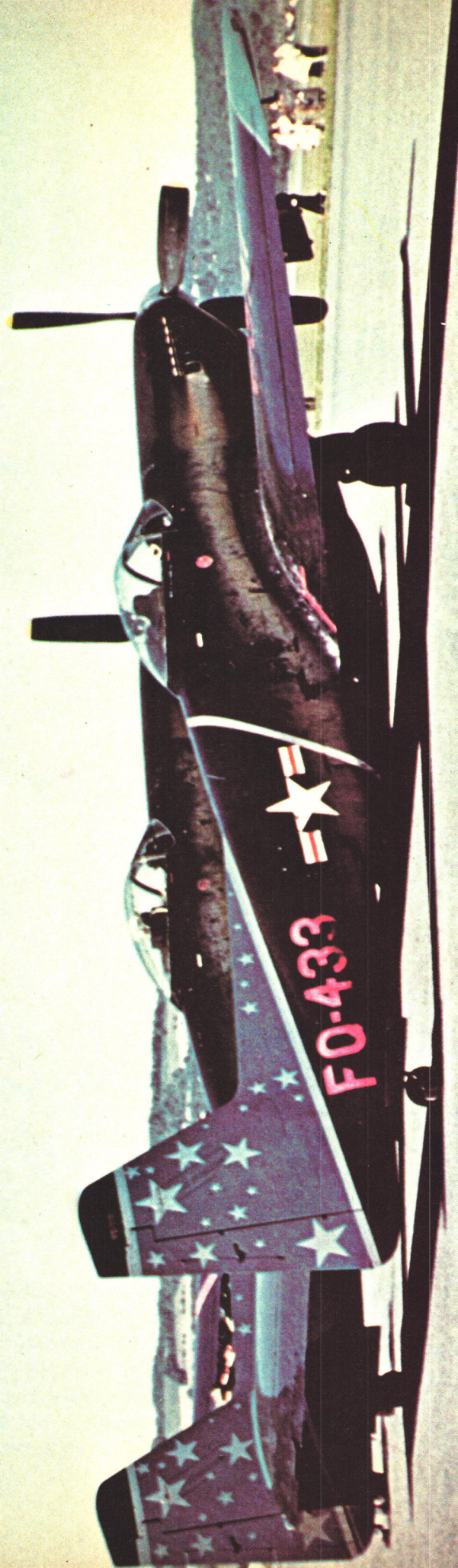
This Sunday was no exception for the air traffic controllers in the tower at Itazuke Air Base, located on Honshu, southernmost of the Japanese Home Islands. Tightening grips on coffee cups, wondering if it had been all that good an idea to eat breakfast, they stared out across the rows of aircraft parked wingtip to wingtip on the oil-spotted ramp—glittering aluminum F-80Cs of the 8th Fighter Bomber Wing and the sinister black F-82s, their flanks streaked with blood-red codes of the 68th Fighter All Weather Squadron—and tried to think of some way to survive the next eight hours.

Far East Air Force Headquarters meteorologists in Tokyo, using reports from WB-29s on patrol over the frigid North Pacific, from radar stations fringing the Home Islands' coasts, and from transmitters slung below free balloons launched from bases scattered along the island chain, had built up a map which indicated that cold air masses moving slowly across Manchuria and the rugged Korean peninsula from the Siberian wilderness were bringing heavy rain which would close down the fields by late Tuesday. Squadrons, fitting available aircraft and pilots into their scheduling jigsaw puzzle, set up the usual local patrols and training flights for Monday and then turned their people loose for a weekend's liberty.

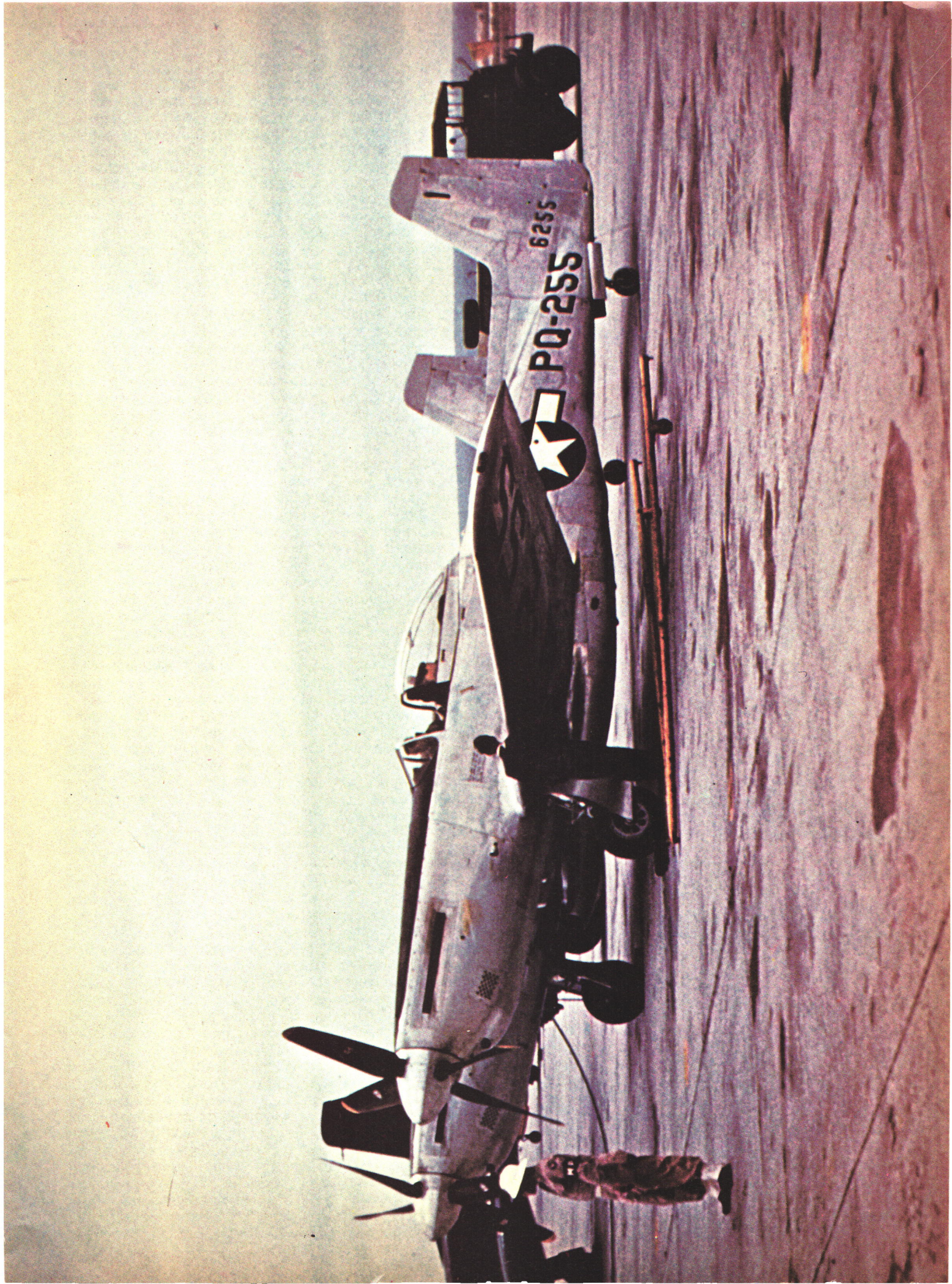
The inevitable "short timer" in the tower crew ticked off one more day, to the accompaniment of boos and hisses from his jealous companions, boasting loudly of how close he was to being rotated back to the United States for processing and discharge. Aside from this, the date held no particular significance: today was Sunday, the 25th of June, 1950.

Across the narrow Sea of Japan other people had also been studying the weather. They lacked the sophisticated network of aircraft and observation stations, but had been raised among the barren mountains of Korea and knew, with the near-instinct of the peasant born and bred, what was going to happen. At 4 a.m. on the morning of the 25th, under broken cloud and light drizzles, armored columns of the North Korean Army, headed by the same T-34











medium tanks which had cracked the Nazi Panzers at Stalingrad, struck south across the 38th Parallel, the *de facto* border established by the Allies and Russia following the war, rolling up the flimsy defenses of the Republic of Korea and spreading like a flood across the countryside. Simultaneously amphibious landings were made along the eastern coast, south of the village of Kangnung, these forces cutting inland to link up with their comrades in the classic combined operation hammered out in Italy and France.

Despite the presence on the scene of American advisers who could make an accurate estimate of the magnitude of the invasion, it was not brought to the attention of FEAF Headquarters until 9:30 that morning. The Communists had been probing for years, and the attack was considered to be simply another provocation, and as such a purely local matter. Even repeated requests by the Republic's President, Syngman Rhee, for additional artillery, and especially for more planes—the Republic's air force consisted of a ragtag collection of trainers and liaison types—were viewed as less than urgent.

This curiously detached attitude was the result of the United States' official hands-off policy concerning Korea's internal affairs rather than deliberate indifference. FEAF units were not to be used to support the Republic in the event of an "incident," but only to assure the safety of American nationals and their dependents, and to protect bases in Japan itself.

Eventually, reports from the advisers and from the Ambassador to South Korea were taken seriously enough to see a contingency plan from the evacuation of civilians put into effect. This called for the C-54s of the 374th Troop Carrier Wing, escorted by fighters, to take the evacuees aboard at Seoul, delivering them to Ashiya Air Base at the southernmost tip of the main island, Honshu. The fighters were under strict orders not to open fire unless they or their charges were attacked.

All through the 25th, the situation was too confused to follow properly, and by that evening it appeared that the Republic's armed forces were containing the North Koreans and might be able to push them back beyond the Parallel without outside assistance. Accordingly, the transports were released and, while American forces were still on the alert, the planes returned to their normal duties—but they did not regroup at their normal base, Ashiya. B-26s of the 8th Bombardment Squadron

(Light), at Ashiya for an exercise, were ordered to remain at the base, and took up the 374th's ramps.

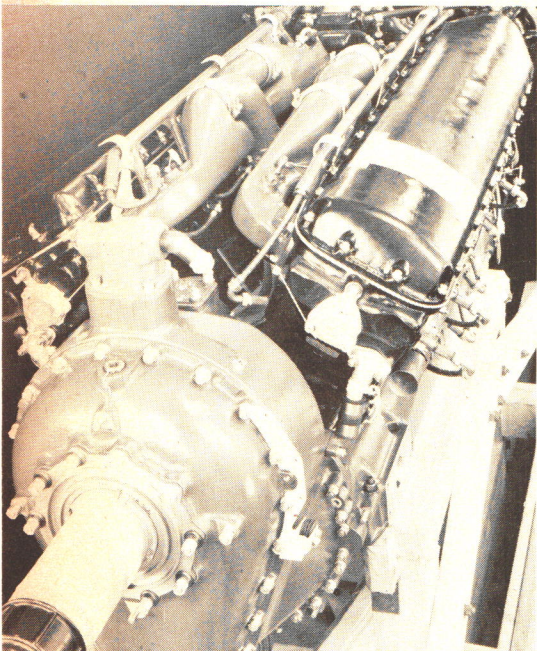
In the meantime the North Korean Air Force had taken the initiative, scouting both Seoul and its satellite field to the northwest at Kimpo at midday, returning in the afternoon to attack targets at both airfields. As the sun set towering pillars of oil black smoke, shot through with lurid flame, marked the pyres of half of the ROK Air Force, fuel dumps, ground facilities—and one lonely MATS C-54, stranded with a damaged wing.

The attacks finally brought home the seriousness of the situation, and the evacuation plan was ordered to be implemented. With the transports scattered, the decision was made to remove all nonessential civilians by sea, loading them aboard transports in the harbor at Inchon—a name which leapt into the headlines when it became the site for the first major American counterattack of the war. Friendly foreign nationals swelled the numbers to be taken out, and they were immediately joined by the personnel of the United Nations Korean Commission, who exhibited their usual concern for personal safety rather than the principles they supposedly were dedicated to upholding. By one of those quirks which seem to delight Fate, the evacuees embarked on a Norwegian freighter, the "Reinholte," which had just offloaded a cargo of fertilizer.

In accordance with the original plan the 8th Fighter Bomber Wing was assigned to fly cover for the embarkation, and escort the ship until it was safely at sea. It was pointed out to FEAF Headquarters that the planes involved were Lockheed F-80C Shooting Stars, never noted for fuel economy at low levels. As a result the burden of the mast-head-level escort was shifted to the North American F-82G Twin Mustangs of the 68th, from Itazuke, backed up by the planes of the 339th Fighter All Weather Squadron from Yokota and by an eight-plane detachment of the 4th FAWS, a 20th Air Force squadron. These had flown up from their base at Naha, Okinawa, far south of the Home Islands, in the Ryukyus chain.

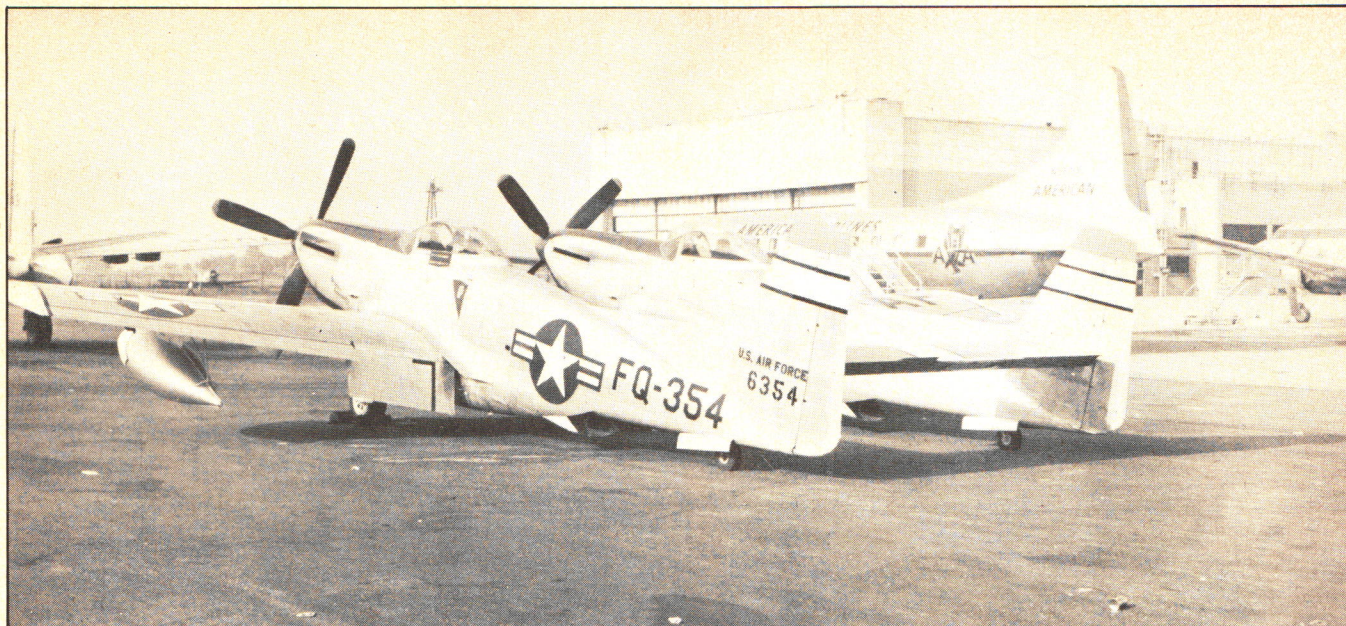
The major load thus fell on less than three dozen night fighters, pressed into service in a role which they had never been intended to fill.

Possibly as a result of peacetime realignments, coupled with the increasingly rapid conversion from propeller-driven to jet-propelled aircraft, the Merlin engines used in the conventional Mustangs and the prototype P-82s, and in the minus-



The Allison V-1710, the 1600 hp V-12 engine which powered the F-82E and its night-fighter derivatives. The engine was also installed in several of the most famous American fighters of the Second World War: the P-38, P-39, P-40 and P-63.

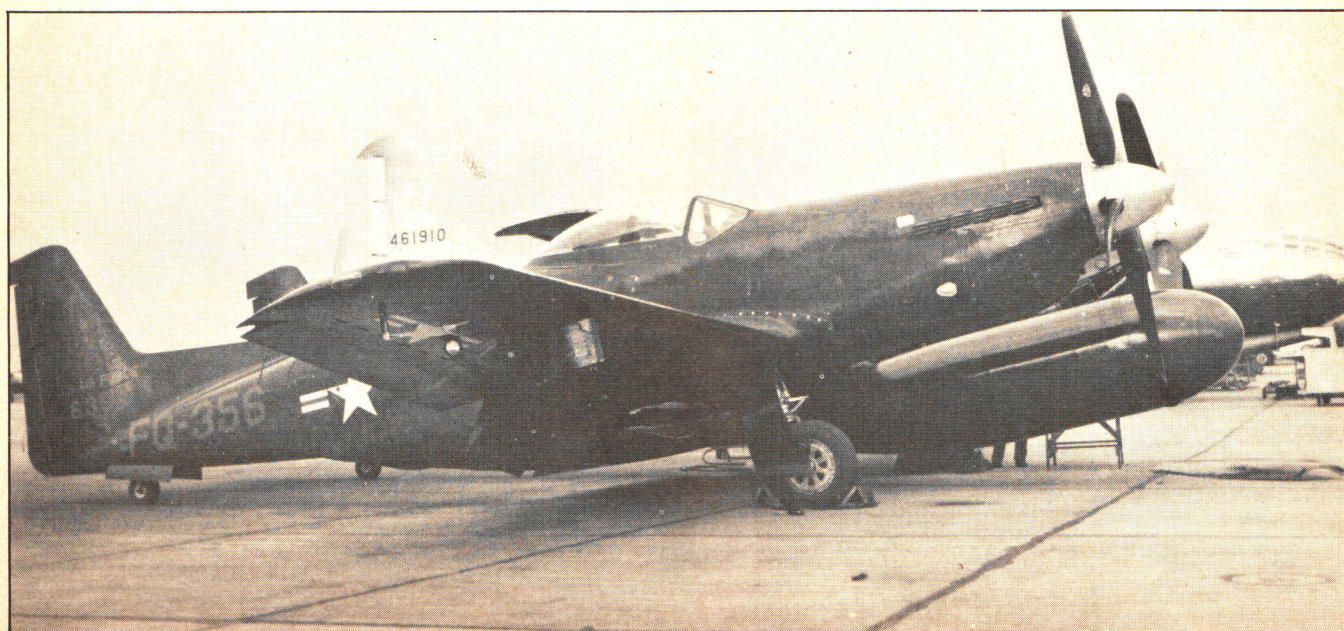




"Double Indemnity" from a quartering rear position. The unit color trim even extends to a band wrapping around the horizontal tail unit. These are some of the most extensive markings ever seen on a postwar, pre-Vietnam, pre-Korea Air Force airplane. (Brian R. Baker)

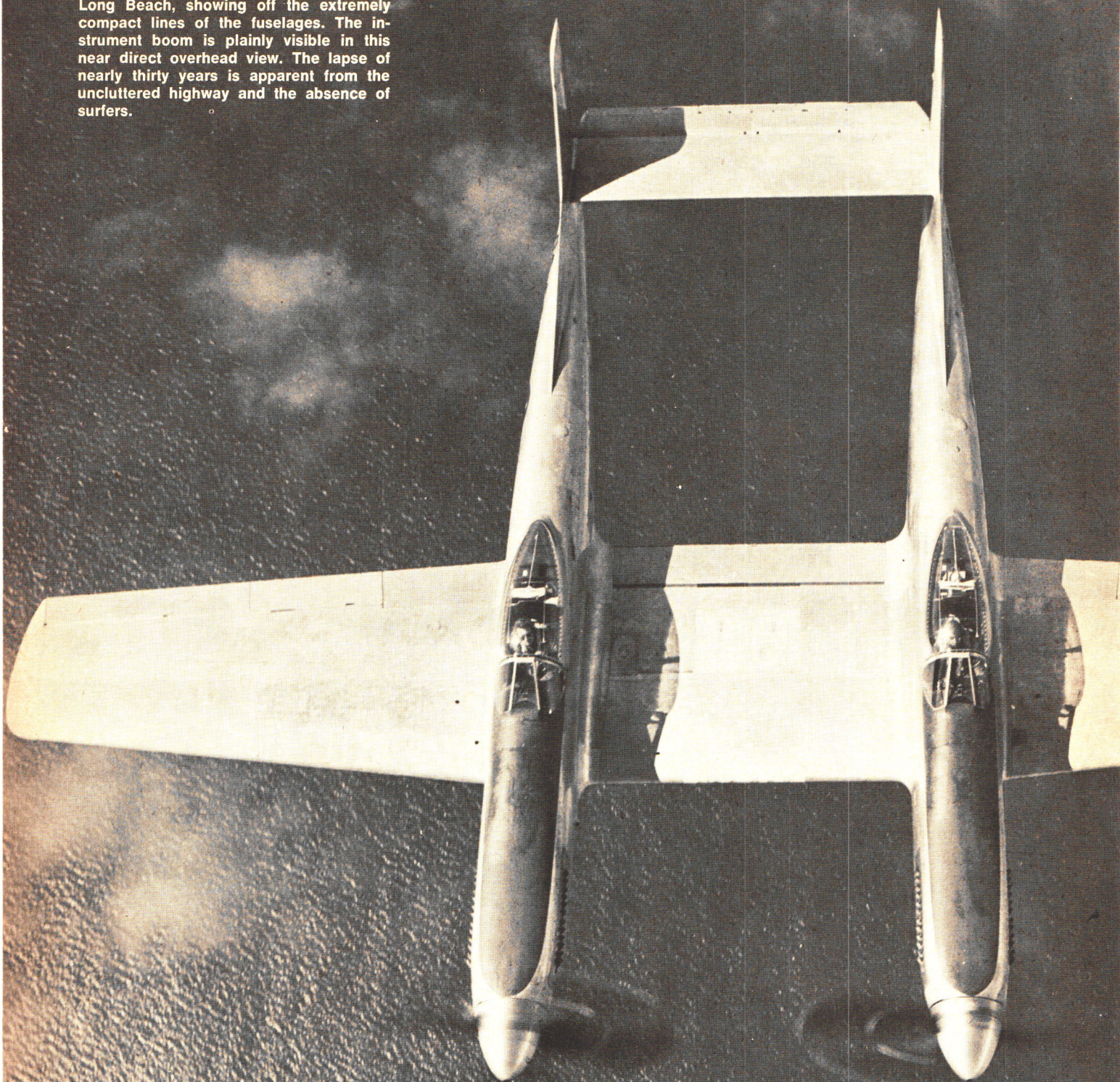
An F-82F, 46-477, carrying the name "Grumpy," in red. Despite the photograph's being taken during the latter half of the Korean War, "Grumpy's" pilot continues to wear a Second World War leather flying jacket and helmet. He and his crew chief are busily filling out post-flight "gripe" sheets which will be used to determine what maintenance has to be done.

An F-82G, 46-356, down for engine work. The bare-metal propeller spinners are unusual, but the background details excite the most interest: at least two B-29s, one with black undersurfaces which were common during the Korean War, and a B-25. (Brian R. Baker)

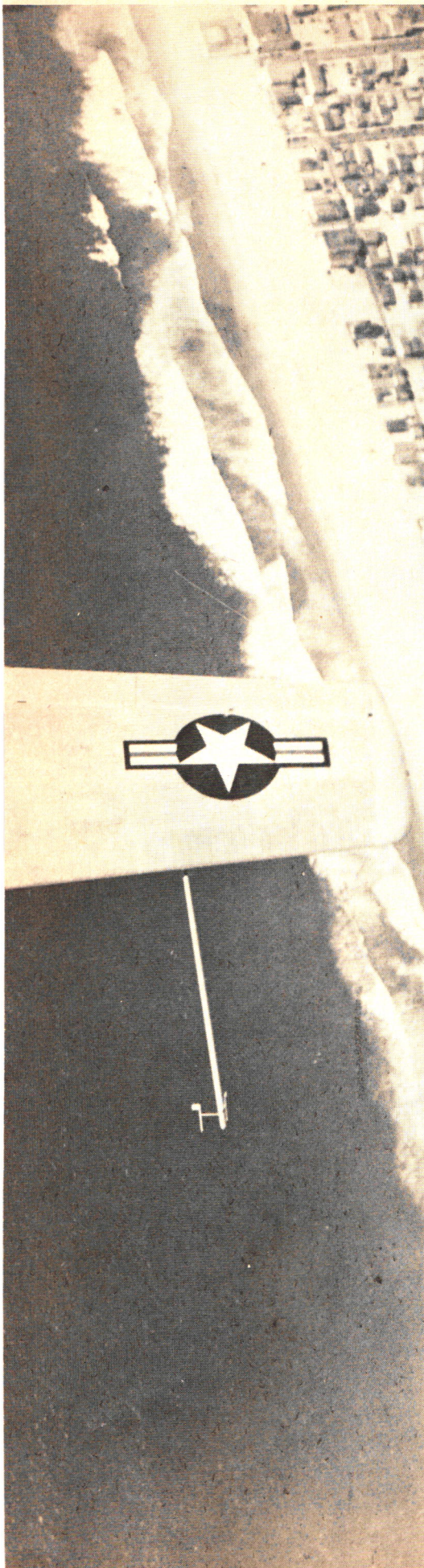




256 prowls along the coast south of Long Beach, showing off the extremely compact lines of the fuselages. The instrument boom is plainly visible in this near direct overhead view. The lapse of nearly thirty years is apparent from the uncluttered highway and the absence of surfers.







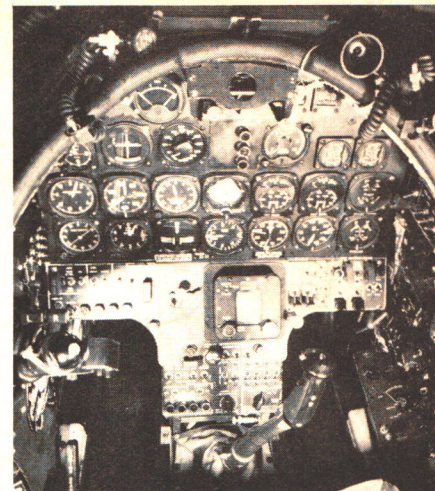
cule production run of P-82Bs, were dropped when the P-82E was ordered. Instead, this version, North American's Model NA-144, came full circle, being modified to use the Allison V-1710, the same engine the original NA-73X had been designed around.

The P-82E, intended to fill the role of long-range bomber escort, retained the overall clean appearance which had contributed a great deal to the appeal of the earlier single-seat airplanes. The change in powerplant, however, resulted in a radically reconfigured forward fuselage, slab-sided and bulky, attractive in a way but not in the same class as the Merlin-powered D or even the portly H. The twin Allison engines were geared to drive "handed" Aero products propellers, eleven feet in diameter, the right-hand engine turning clockwise while the left went counterclockwise. This was done to counteract the combined torque of two 1600 hp engines turning up simultaneously, a factor which had often been overlooked in earlier twin-engine designs, with fatal results in far too many instances. A curious feature of the Allison-powered P-82 was a virtual fringe of exhaust stacks, each cylinder dumping through two of these, rather than the single stack per cylinder of the Merlin, or even of the V-1710 when installed in other types of aircraft—the P-38 and P-40, for example.

The basic armament was unchanged: a battery of six .50-caliber Colt-Browning M2 or M3 machine guns, each rated at 600 rounds per minute, completely enclosed within the centersection stub with provisions for 400 rounds per gun. External stores were carried on four bomb racks, one installed on each outer wing panel, with two on the stub. The outer racks would be loaded with a wide variety of ordnance: conventional "iron" bombs, weighing from 100 to 1,000 pounds; 500-pound cluster incendiaries or fragmentation bombs; or auxiliary tanks, for fuel or chemicals, with capacities ranging from 110 to 310 gallons. The centersection racks were unsuitable for the tanks or fragmentation clusters, but could be loaded with any of the other stores. In addition they could be adapted to carry one 2000-pound bomb apiece, although this configuration represented the total load.

Special rocket launchers could be installed in place of the outer pylons, and in addition there were attachment points for a second launcher on each outer panel. A fifth could be installed on the stub centerline.

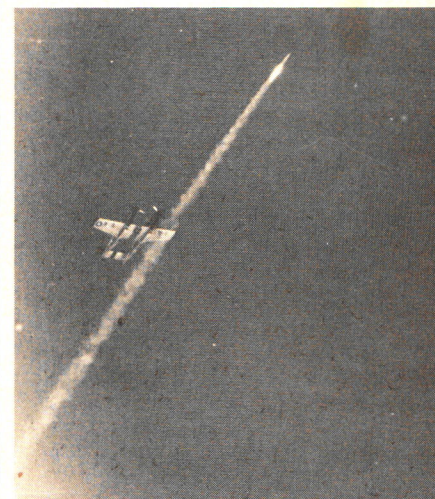
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The pilot's instrument panel in an F-82G. The K-18 gun sight has been removed, but the mount is plainly visible below the lip of the glare shield over the panel.

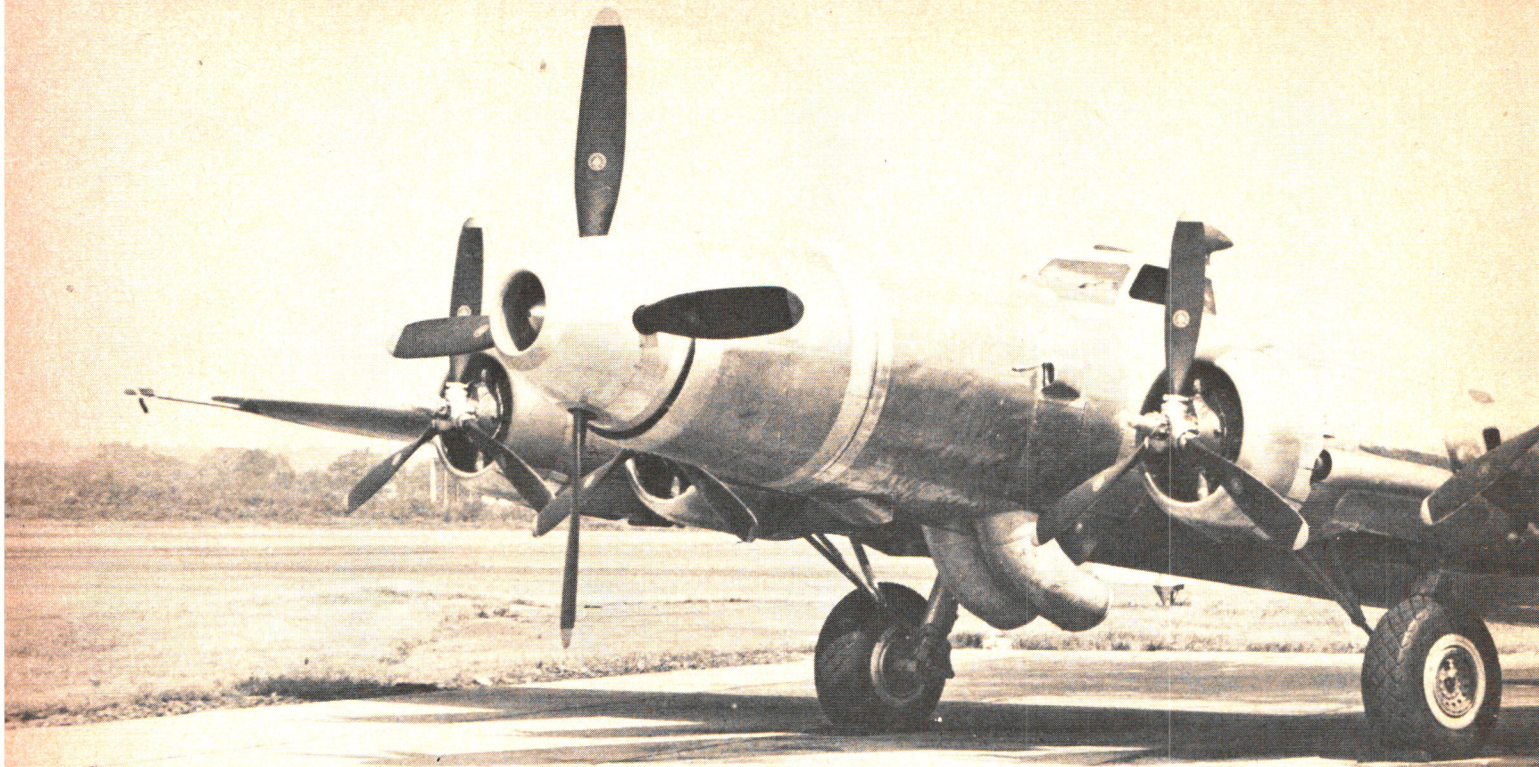


An F-82 beats up the gunnery range at Nellis. The plane, an F or G, has been fitted with conventional pylons as well as the HVAR launchers.



A representative from the third squadron which made up the 27th, exhibiting a confusing mixture of features: two pylons on the right wing, none on the centersection, one on the left panel, and a rocket launcher. The plane is firing at a target on one of the gunnery ranges which dot the Nevada desert. The rocket being fired is a 5-inch high-velocity aircraft rocket (the "HVAR" which became famous towards the end of the Second World War and in Korea).





# THE BOEING

**This converted B-17 flew with piston engines, turbo-props, and jet power setting a record for the number of engines used by one aircraft. Curtiss-Wright put the old bird to good use for many company projects and these photographs showing the various developments are published for the first time.**

**by Michael O'Leary**

## **B-17 with a difference**

**T**HE DEMANDS OF the growing American aviation industry after World War Two were many and varied. Engine manufacturers were having trouble trying to find test beds for the massive new engines that were being built. Pratt & Whitney's and Curtiss-Wright consulted with Boeing Aircraft Co. on the problem of adapting a B-17 airframe for an engine test bed.

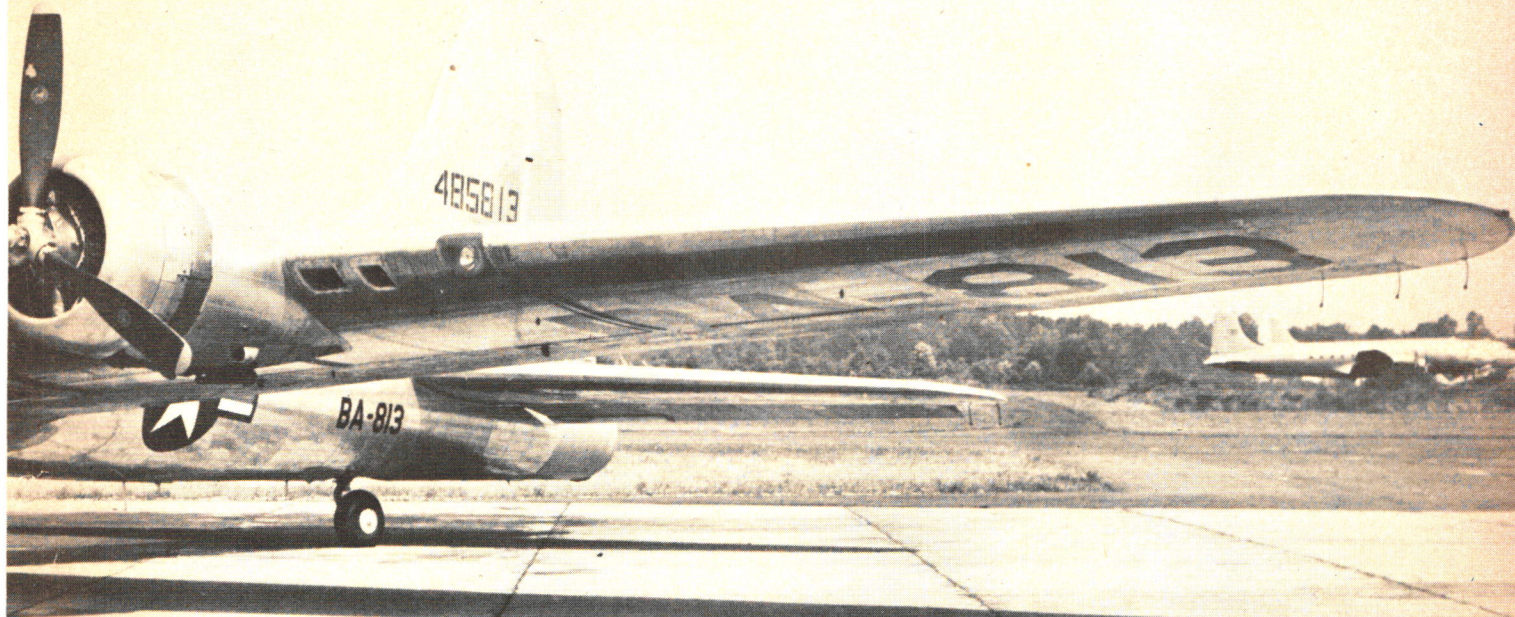
The B-17 was chosen for its rugged structure, ease of maintenance, and the fact that it had a tail wheel. The conventional landing gear was an important feature to the engine companies for they needed an aircraft that could handle the massive props that their engines would be using. The location for the engine in the nose was considered most practical.

Boeing accordingly set out to drastically modify two B-17s for use as the flying test beds. The airframes were completely gutted and absolutely stripped of all former military hardware. Every piece of non-essential equipment was stripped out and then a major conversion in the cabin area was undertaken.

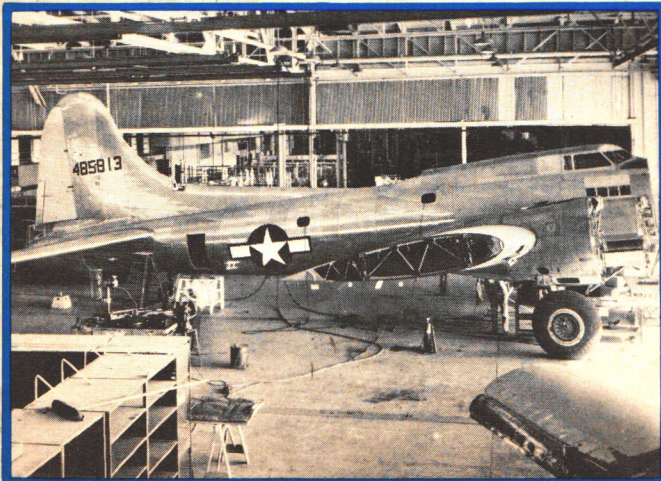
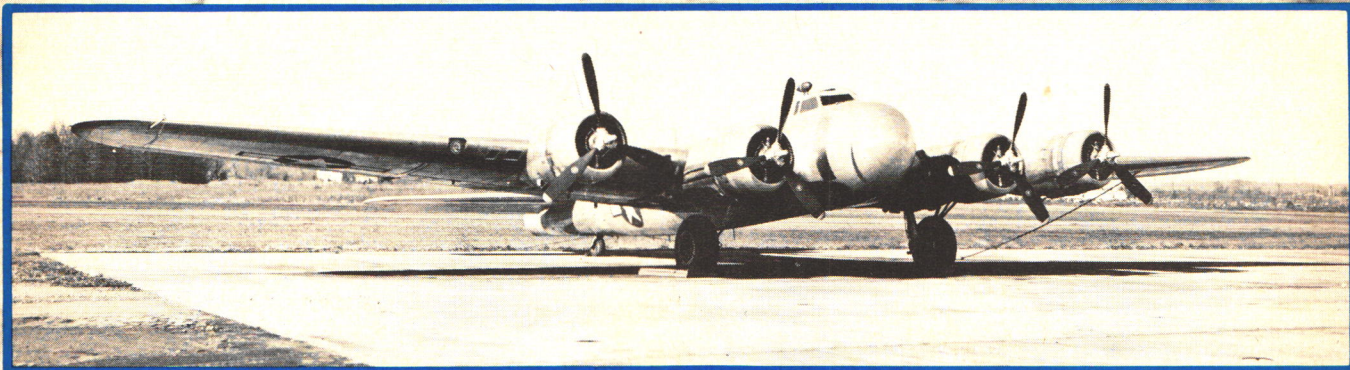
The entire pilot's compartment was moved aft several feet and the controls, hydraulic lines, and wiring had to be suitably modified. The nose of Pratt & Whitney



The modification for the installation is apparent in this photo that shows to good advantage the vast areas of new metal required for the conversion. Even with all the modifications, 813 compiled an excellent safety record.



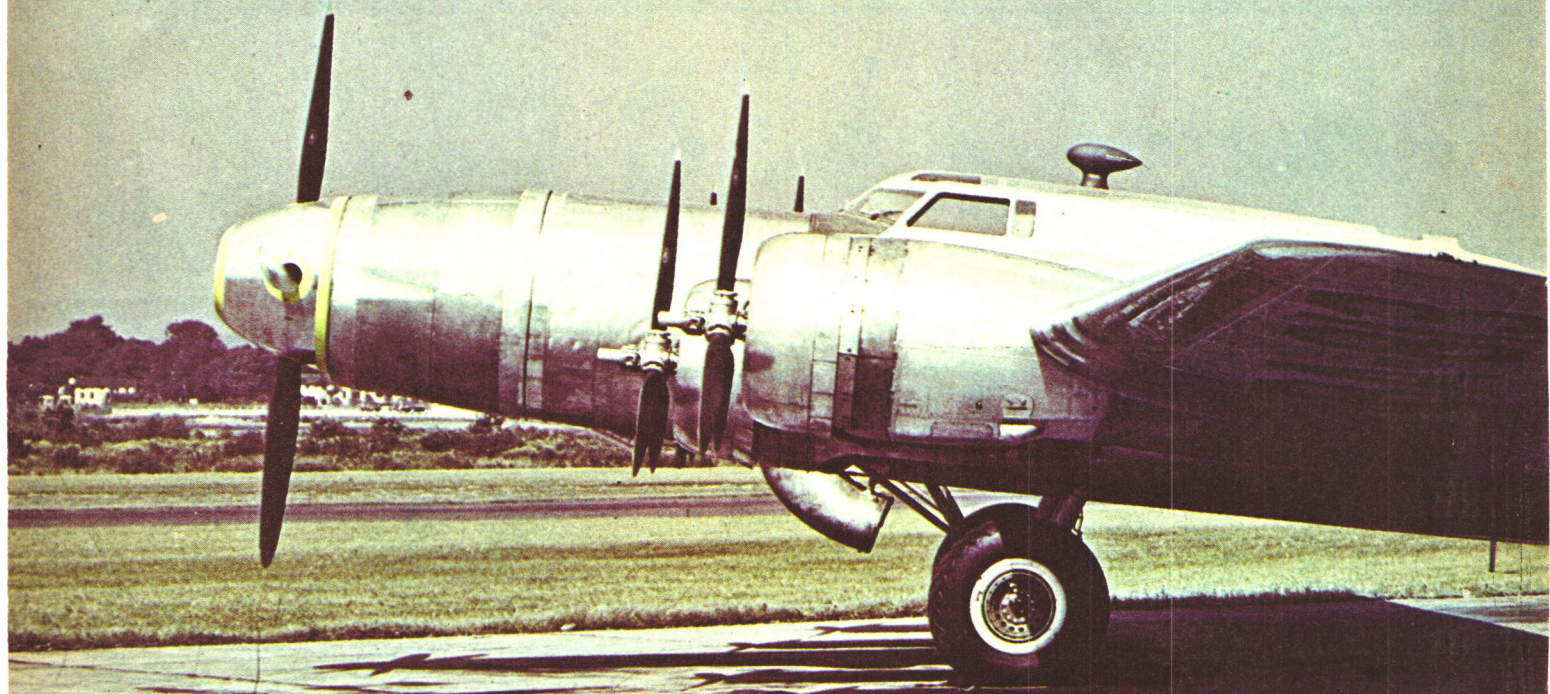
# NG 299Z...



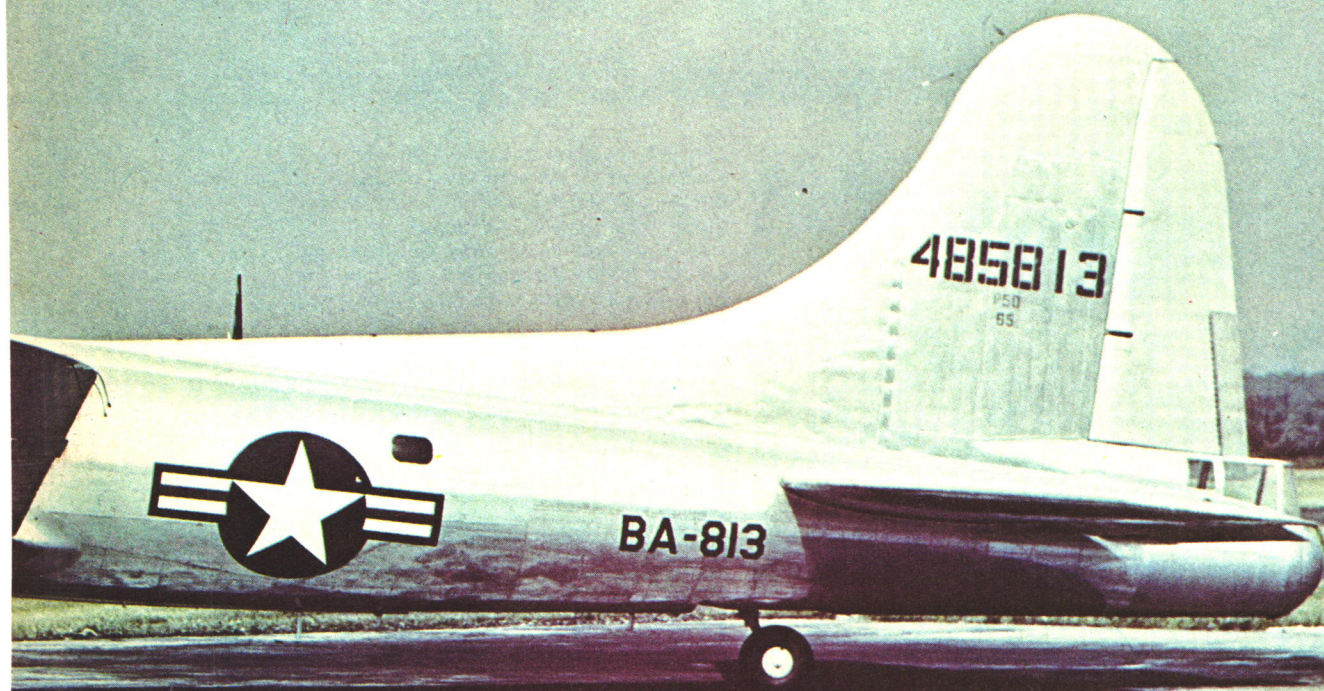
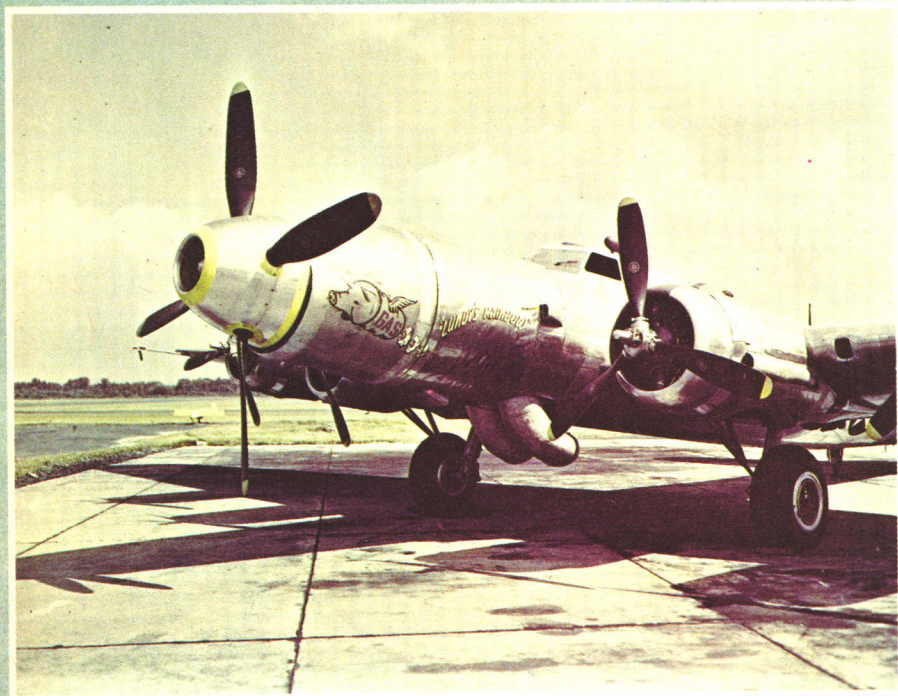
The Curtiss-Wright test bed fitted with the nose fairing for ferry flights. It is not known what flight characteristics the B-17 possessed with the bulbous nose but they probably weren't good.

813 at Boeing undergoing conversion. The 299Z was a low time airframe provided by the USAAF for the Curtiss-Wright engine test bed program.

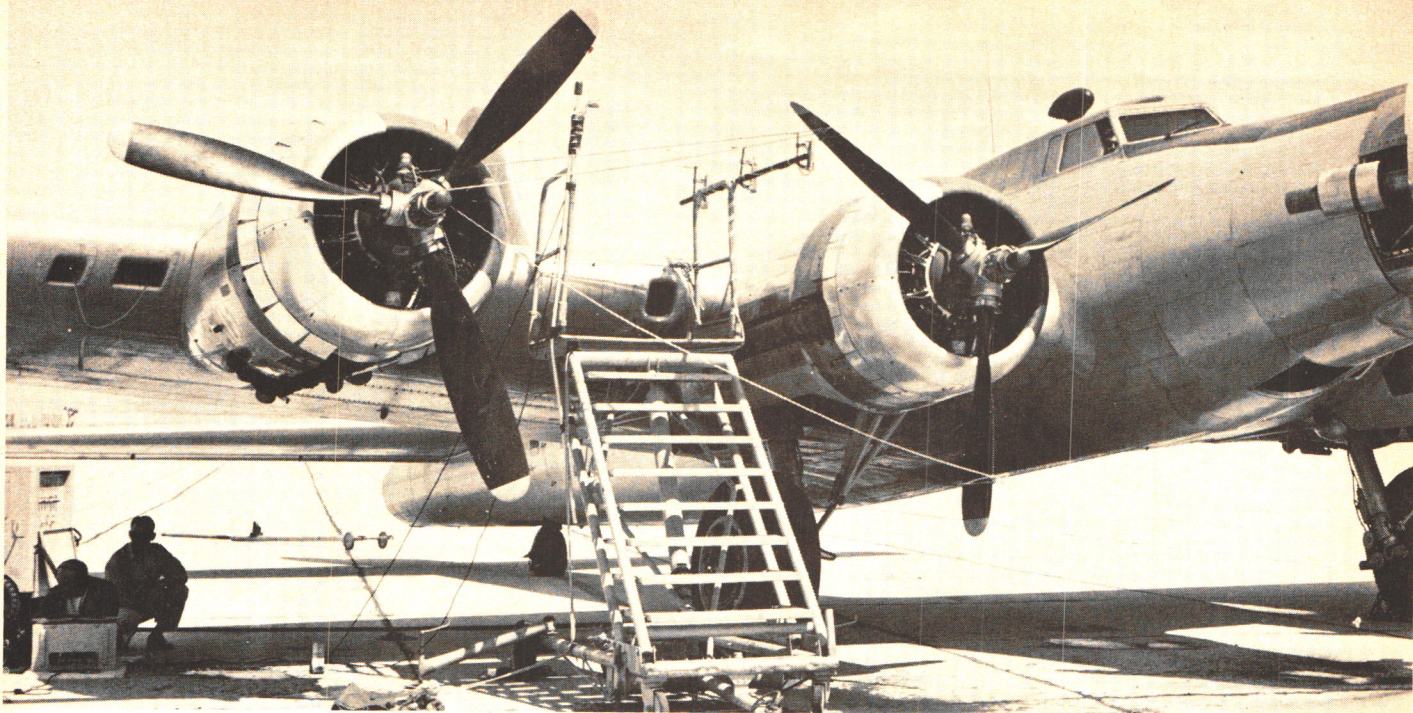




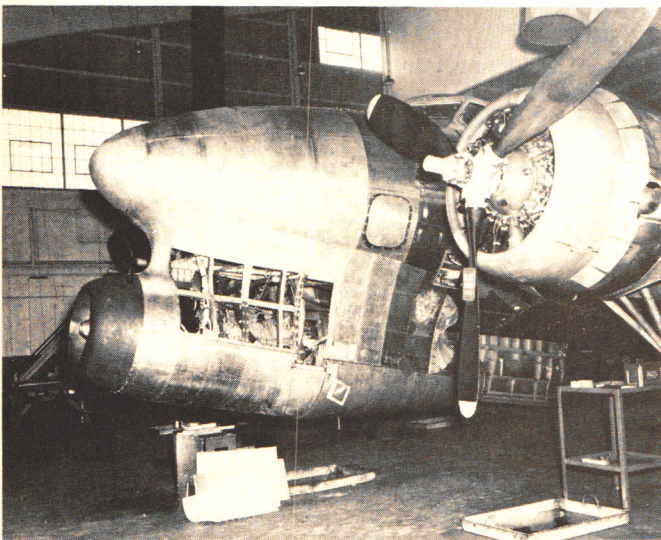
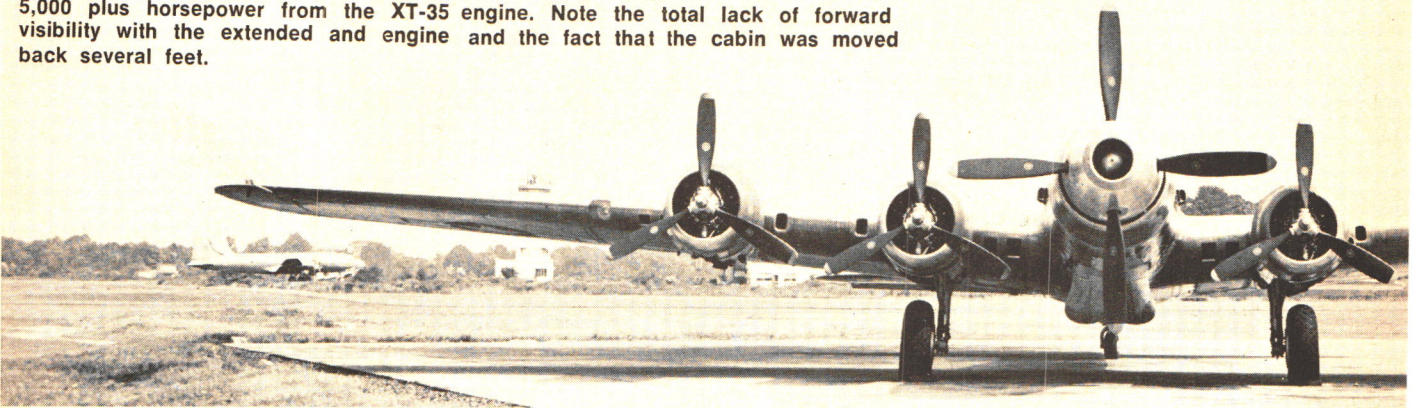








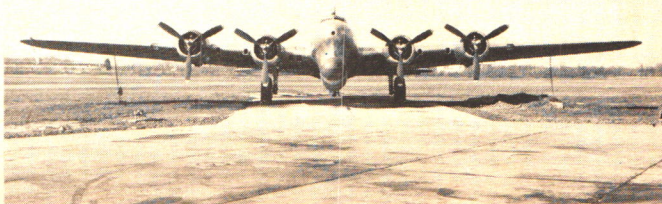
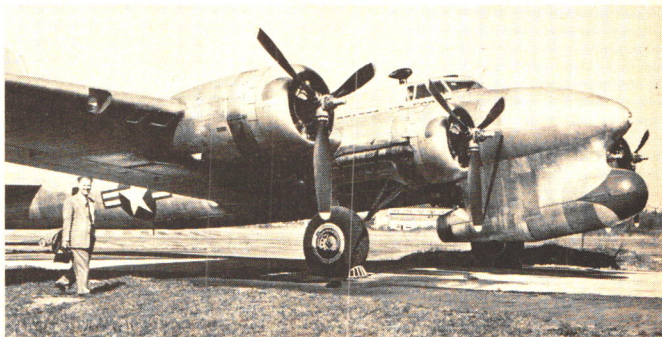
The large diameter Curtiss Electric propeller that was required to absorb the 5,000 plus horsepower from the XT-35 engine. Note the total lack of forward visibility with the extended engine and the fact that the cabin was moved back several feet.



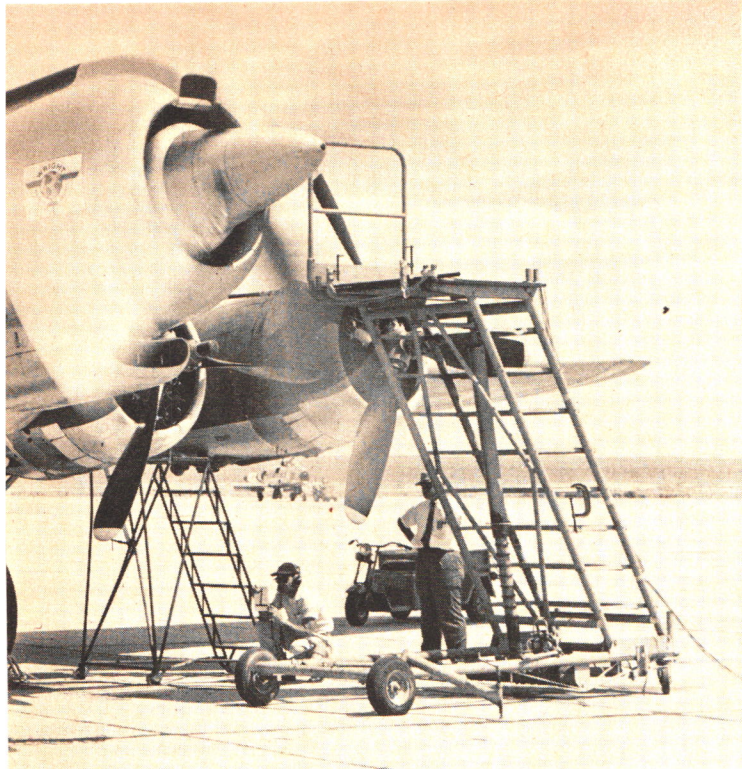
Close-up of the modification required to mate the jet engine to the B-17 nose. The entire installation for the XT-35 and the R-3350 was done away with and the Curtiss-Wright engineers went to work on the new installation. Note that the standard bomb bay doors are still in place.

Frontal view shows neat jet installation.

The jet installation proved to be fairly streamlined. A covering was placed over the engine intake and removed before flight. When 813 was phased out of service the whole installation was removed and the ferry nose was installed, and the Fortress was flown to its new home.

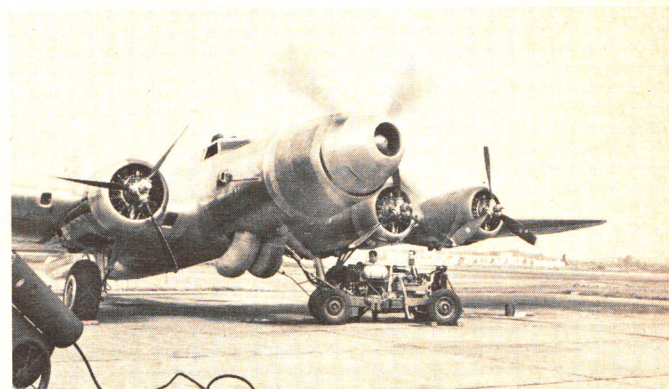
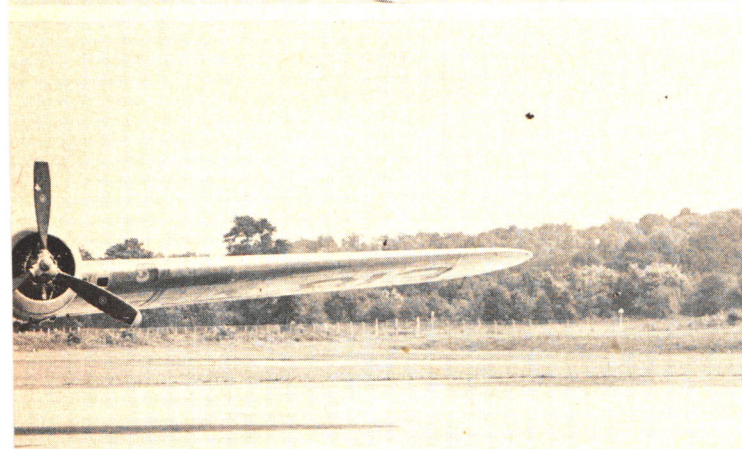
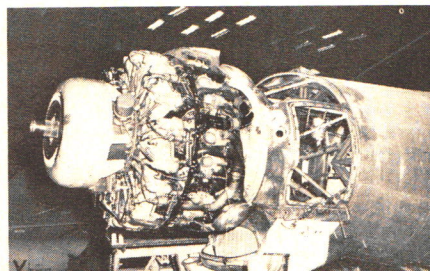






The R-3350 being run-up before a test flight. The constant ground running made life miserable for the ground crew and an attempt to suppress the noise was made by adding a form of muffler to the exhaust stacks.

Close-up of the modifications required for mounting the R-3350 reciprocating engine in the nose. This development paved the way for usage of the R-3350 in civilian and military aircraft.



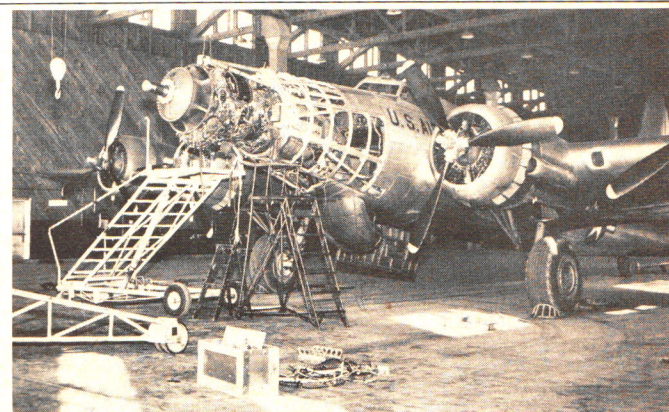
Running up the XT-35 turbo. The massive exhaust dumps are noteworthy. This engine was quite capable of powering the B-17 in flight while the four stock engines were feathered.

machine was outfitted to accommodate the XT-34 turbo-prop while the Curtiss-Wright machine was equipped to hold the massive 5,500 hp XT-35 Typhoon turboprop. The machines were equipped with nose fairings that would enable them to fly when the nose-mounted engines were not fitted.

The Curtiss-Wright Aeronautical Company received a B-17G-VE s/n44-85813 on bailment from the Army. The Army turned the craft over to the company as an EB-17G, but this designation was changed to JB-17G in October of 1956. The second craft, a surplus B-17G-VE s/n44-85734, was obtained by P&W and converted at Boeing's Seattle plant.

After the completion of the conversion the aircraft was assigned the civil registration of NX5111N. The plane was ferried to Hartford, Conn., where it served for many years as a P&W test bed. It was finally disposed of to a local museum where it now sits in a state of disrepair.

The Curtiss-Wright machine flew many test hours carrying such a diverse selection as piston, turboprop, and jet engines. The craft was retired during the 1960s and sold to a fire bomber operator who put on the nose fairing and flew it to his home base where he has been carrying on a slow conversion to bring the machine back to standard condition. The following photos are presented as an exclusive record on how one aircraft was responsible for developing engines that powered thousands of other aircraft.



This photograph illustrates the extensive conversion that was required to mount the massive XT-35 Typhoon turboprop. The Curtiss-Wright hangar witnessed many unusual conversions throughout the years.







Although the rotund shape of the Guppy transports is known around the world, the entire fleet amounted to only six aircraft and their flying days may be over.

# THE GUPPY FAMILY

by Owen Gault

**A** SWOLLEN SHAPE passed through the last vestiges of the Southern California smog belt and the sun glistened sullenly off its silver sides. Its deep-throated roar rumbled heavily and to the casual observer who happened to glance upward, a cloud of silver aluminum was majestically boring its way through the haze. This was the Pregnant Guppy, a super-modified Boeing 377 Stratocruiser that was literally built in a backyard.

The backyard in this instance was the area behind the On Mark hangar at Van Nuys Airport. The time was the early 1960s, and the modified Boeing was the brainchild of one Jack Conroy.

The idea of an outsized transport to carry an outsized cargo had long been a popular one with Conroy. He was also a contractor, non-sked airline pilot, and California Air National Guard pilot flying Boeing C-97Gs. The C-97 seemed to be an excellent vehicle for configuration to an oversized transport as it lent itself to stretching and swelling.

Unfortunately, Conroy had the idea but no money. He took the idea to Lee Mansdorf who owned a number of surplus 377s purchased from airlines when they were declared surplus after a short service life. Mansdorf probably would have had a hard time getting rid of his surplus white elephants on a market that was already becoming nearly all jet. Mansdorf agreed to provide Conroy with airframes but no financial support.

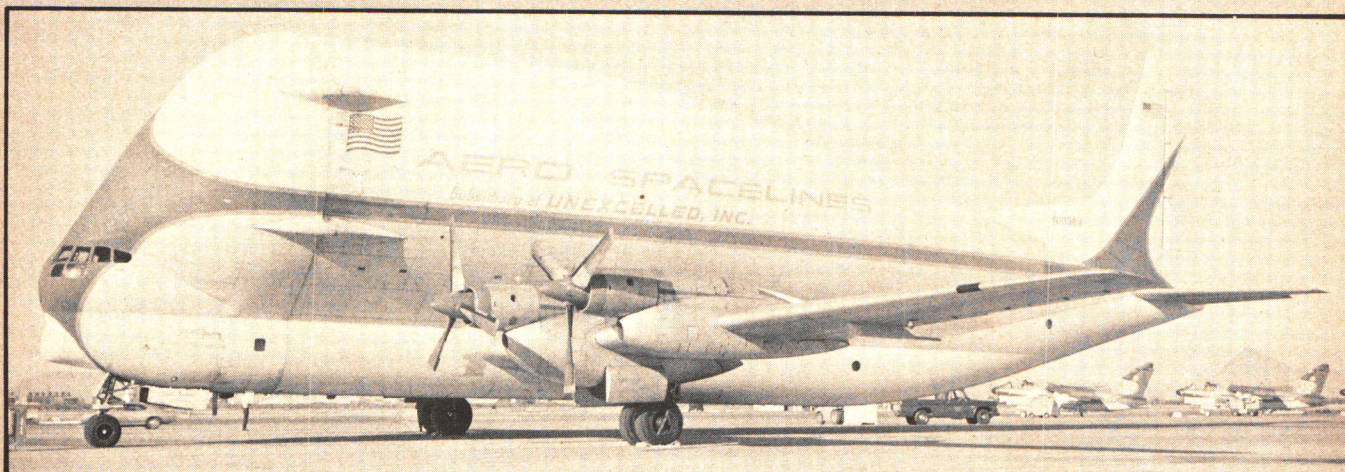
At this time NASA was taking a very active role in the space race. They were able to lob fairly large payloads into outer space but they were having one heck of a time moving the things that got the payloads up there. By this time Conroy had drawings made for

The first of a new breed leaves the ground at Van Nuys Airport on 19 September 1962. Jack Conroy's imagination outstripped even the wartime artists, who seemed to think that built-in swimming pools were essential features of all aircraft.





The Super Guppy, N1038V, forming with a Lear Jet over the San Fernando Valley. A different procedure was adopted in order to load cargo: in this instance the entire nose was swung aside, massive hinges being installed in the left side of the fuselage.



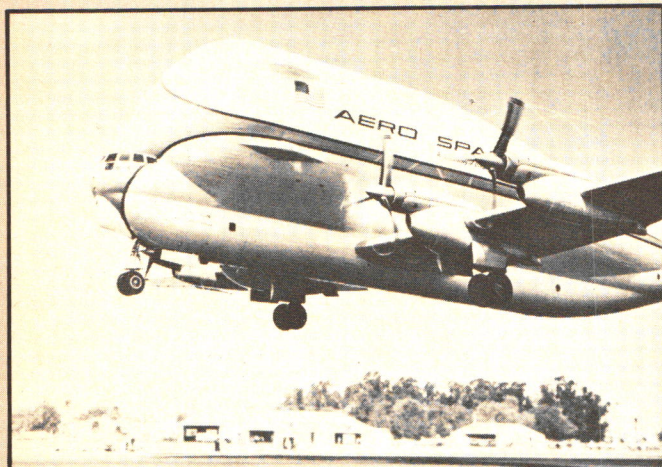
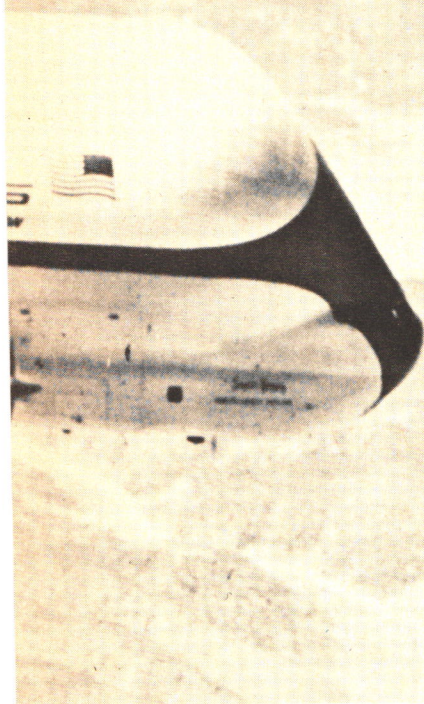
Looking a bit worn, 1038V squats on the ramp at Davis-Monthan AFB, outside of Tucson, Arizona. The plane had been flown over to transport preserved LTV A-7A Corsair IIs to the factory for complete overhaul and modification.



The "Pregnant Guppy," a standard Boeing 377 stretched and fitted with a new fuselage which more than doubled its original volume. The entire tail is unbolted and rolled away in order to load over-

sized cargo: the fuselage splits just aft of the wing trailing edge, the section visible as differently textured metal. The break runs through the "C" in the line name.





The second Aero Spacelines creation, called the "Super Guppy." This particular machine used the wings and engines from one of the YC-97Js based at Norton AFB near San Bernardino. The first flight of the Super Guppy took place on 31 August 1965.

his proposed transport, so he went off to Washington with high hopes. The NASA officials were skeptical but they did admit that such an airframe would be very useful if it did exist.

Conroy was more determined than ever to construct his behemoth and he hurried back to Van Nuys to sell everything that he had and borrowed everything he could to start construction. The final sum was not great but he formed Aero Spacelines and forged ahead. Due to lack of funds and the unavailability of a large enough hangar, Conroy opened his airplane "factory" in the warm California air behind the On Mark hangar.

At that time, On Mark was busy converting A-26s to executive configuration and the area was scattered with derelict military A-26s, shiny new A-26 transports, the occasional P-51D and B-17G, sections of Stratocruiser, and above all this, rising beneath a spider-web of scaffolding was the immense bulbous shape of a craft that was to become known as the "Pregnant Guppy."

The craft, much to the doubt of the FAA, winged into the air on 19 September 1962 and, to the relief of everyone, exhibited no bad flying characteristics despite the extra 5,000 pounds and huge size. The 377 fuselage was lengthened 16' 8" by splicing, just aft of the wing, a straight fuselage section from another derelict Stratocruiser. The swollen fuselage superstructure was then added, increasing the height by 20 feet.

Loading was accomplished by another radical innovation; the entire fuselage aft of the wing was unbolted from the rest of the aircraft and rolled backward on a special carriage so that the cargo, usually a Saturn IV unit, could be loaded by a special elevating carriage.

In May 1963, a supplemental Type Certificate was issued under Part 8 of the Civil Air Regulations for a maximum payload of 34,000 pounds. In spite of the additional structure, empty weight increased to only 91,000 pounds. Cruising speed, not as important on this mission as on airline service, was reduced to 250 mph.

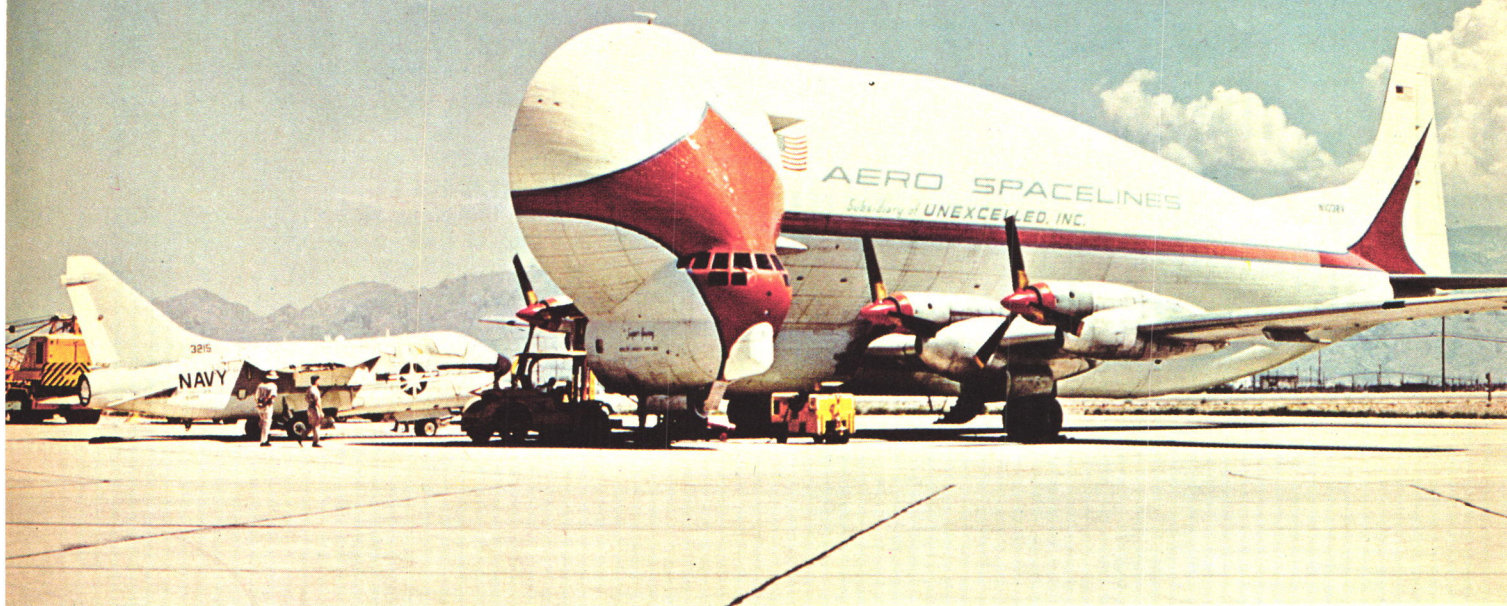
Conroy began to set his sights on large craft. A converted Saro Roe Princess and a sixteen engine B-52 conversion were planned, but in the end Conroy was back to the Stratocruiser. This time Conroy picked up one of the two YC-97Js. This craft was a turboprop



A



B



A) The first of the family, the Pregnant Guppy or Boeing 377PG, at Long Beach Airport. The PG proved that a standard transport could be swollen into a huge super transport. The PG helped carry much of the equipment that put a man on the moon. (R. Trimble)

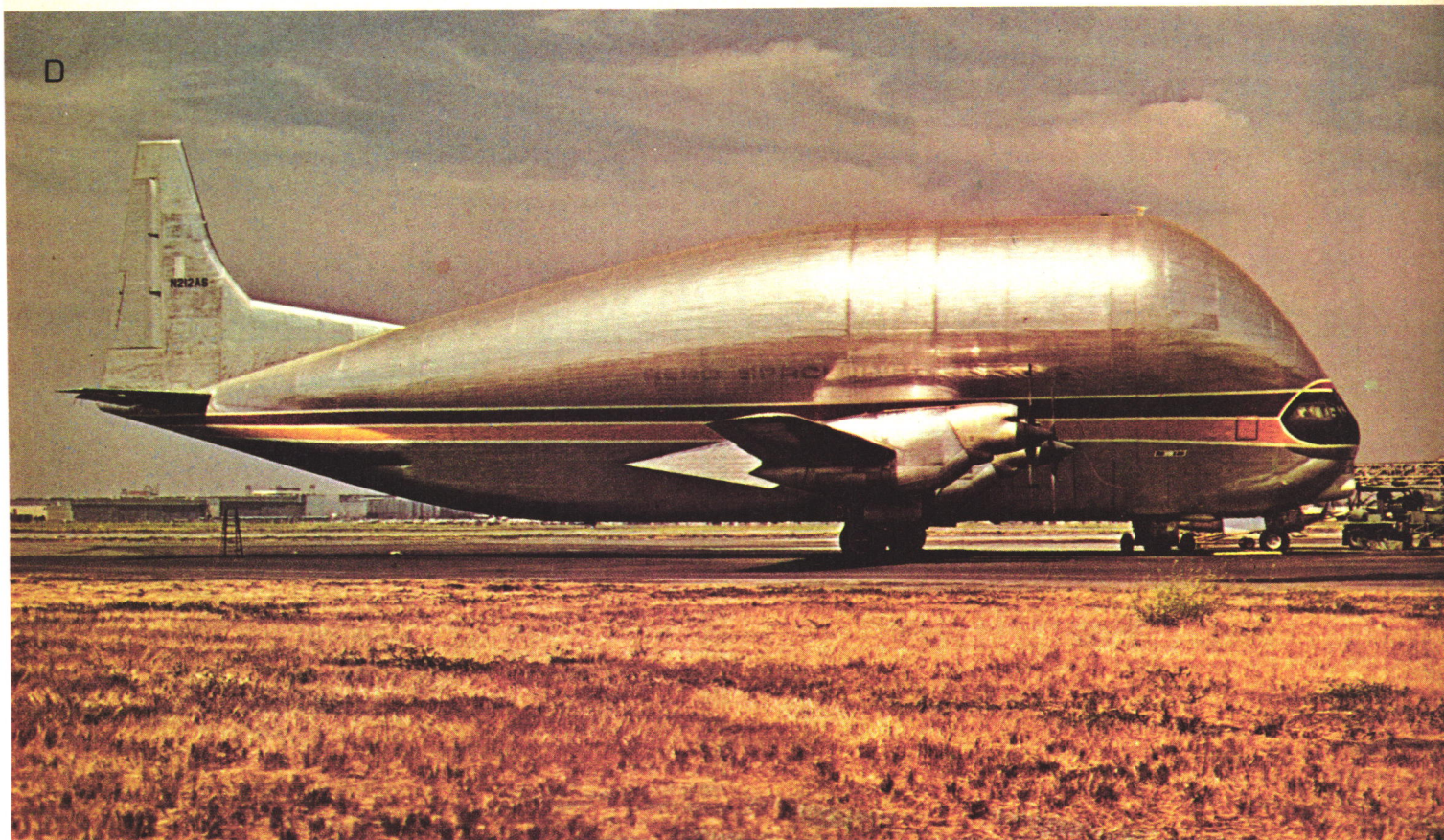
B) The next offspring of the Guppy family was the Super Guppy, a turboprop powered version of the standard C-97. The SG is shown with its massive nose open and ready to receive an A-7 Corsair for transport to the factory for conversion and updating. The location is Davis-Montham AFB in Arizona. (Mick Roth/Centurion Enterprises)



C



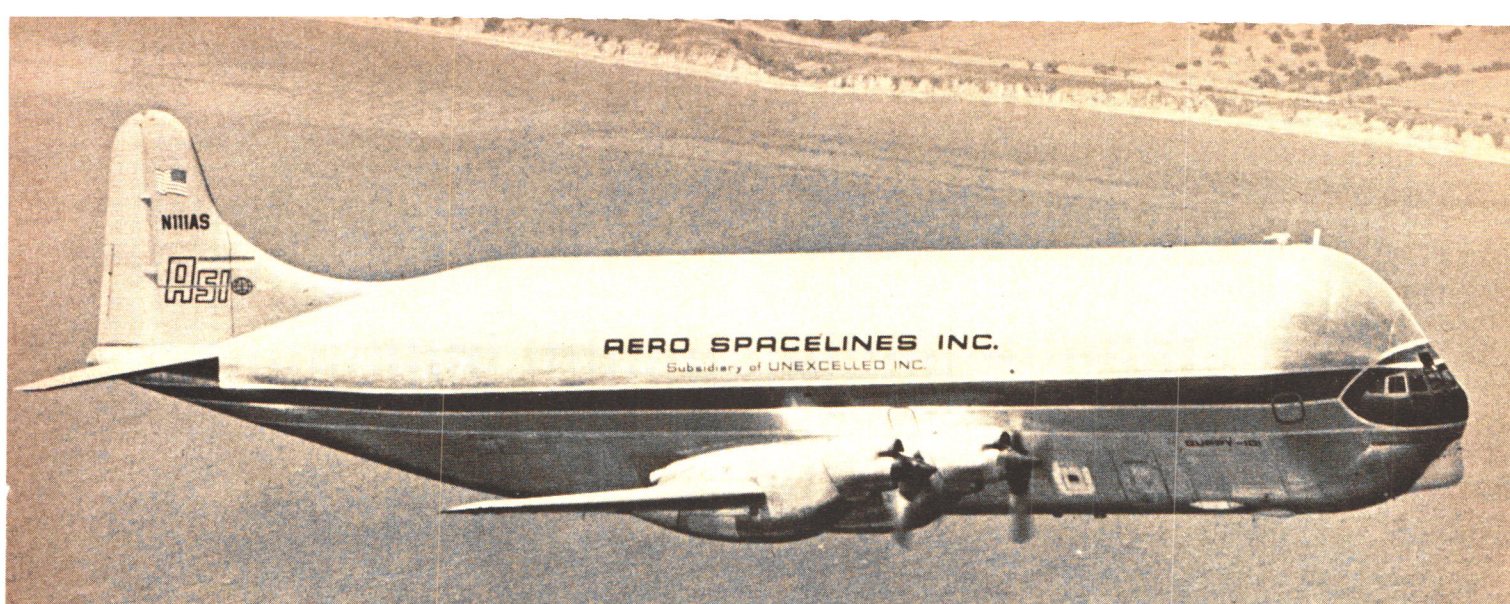
D



C) Third heir to the throne was the Mini-Guppy. The MG was the smallest of the conversions and again utilized the basic 377 airframe. The second Mini-Guppy, a turboprop model, crashed at Edwards AFB while undergoing certification. (M. O'Leary)

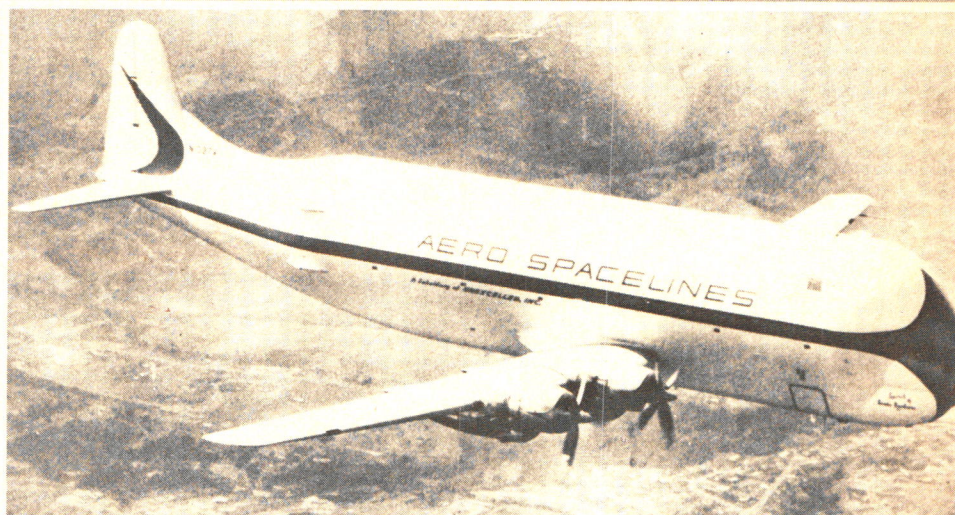
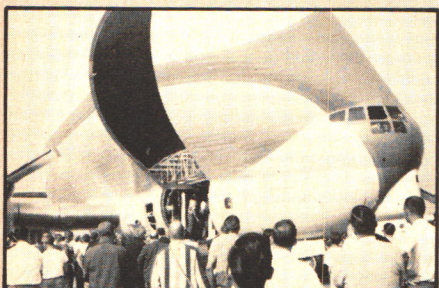
D) The last of the line, the Aero Space-lines G-201A. This craft and another like it, were built for a French consortium. They are used to haul A.300 and Concorde parts from different subcontractors to the main factories. The G-201A is shown at Long Beach Airport prior to leaving for France. (M. O'Leary)





Basically a Mini-Guppy conversion, powered with T-56 turbine engines stripped from discarded Lockheed 188 Electras, the Guppy 101 crashed on a test flight at Edwards AFB, killing the flight crew and the new president of Aero Spacelines.

The Super Guppy on display at one of NAS Point Mugu's annual Space Fairs, with the nose partially swung open. The plane always attracts a large crowd, many of whom probably don't really believe what they see.

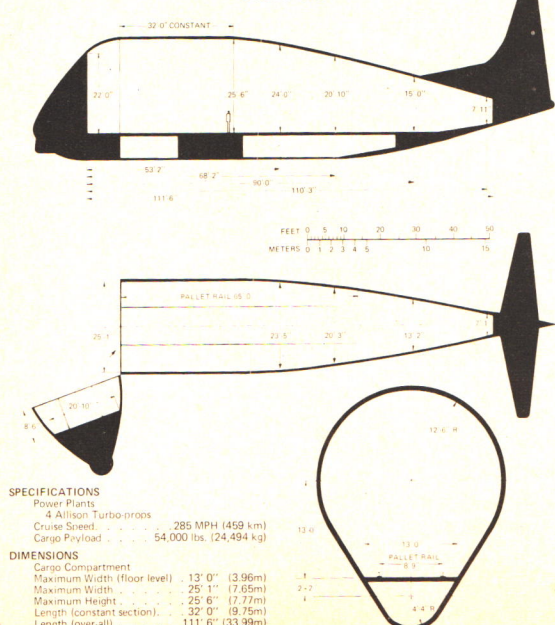


The first of the new type of Guppy, N1037V. Designated the Mini-Guppy, named "Spirit of Santa Barbara," the plane was flown to the Paris Air Show in 1968, where it excited considerable interest among aviation industrialists.

## GUDDY-201

OUTSIZE-CARGO AIRLIFT

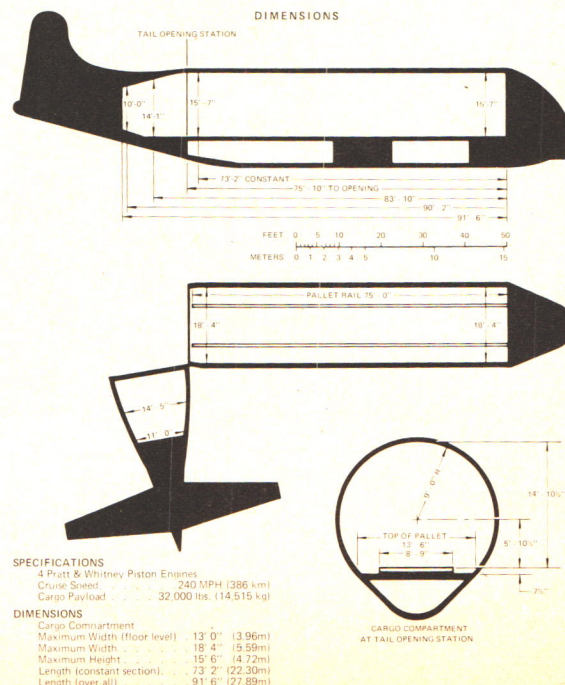
### DIMENSIONS



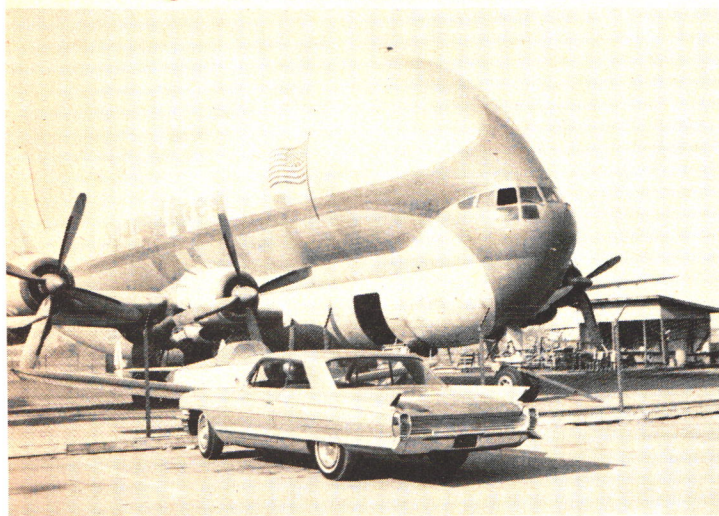
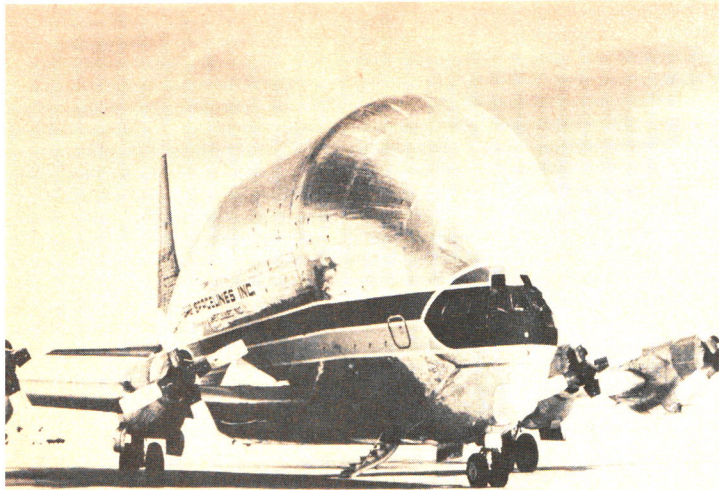
## MINI GUDDY

OUTSIZE-CARGO AIRLIFT

### DIMENSIONS







An ancient, derelict Ercole at Van Nuys gives a good standard for comparison to determine the size of the first of Conroy's modified Stratocruisers.

The latest Stratocruiser permutation, the Guppy 201. Powered by the same type of engines as the ill-fated Model 101, N211AS has been sold to a European consortium and, with its sister ship (212AS), is being used to haul parts for the A-300 Airbus and other aircraft.

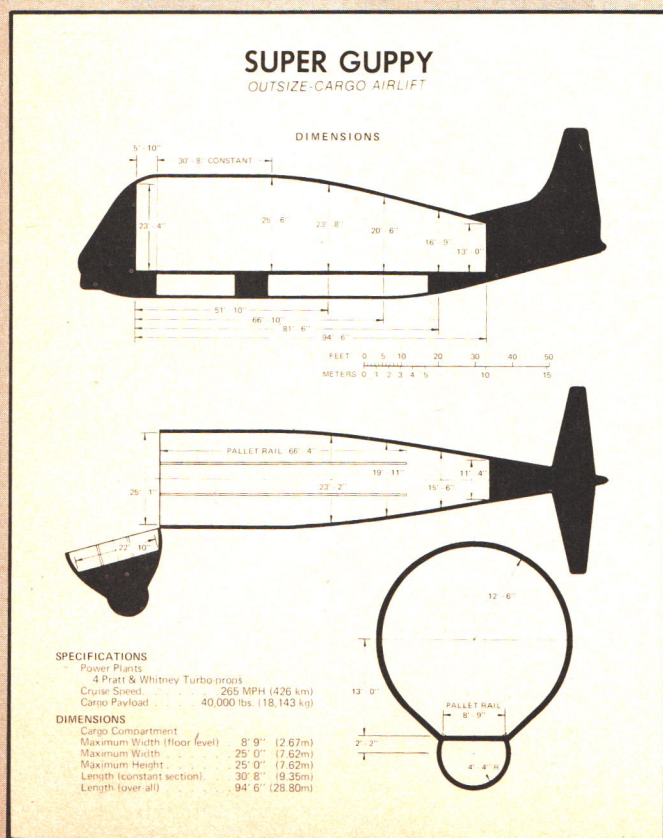
modification of the standard C-97 that was powered by four P&W T-34s, each delivering 5,700 hp. The new craft was designated the Super Guppy and was designed to carry the Saturn IVB rocket and the added superstructure increased the inside diameter to 25' 6".

A fifteen-foot section was added to the wing and the fuselage was lengthened by 30' 10". The nose was designed to open on two hinges that were mounted on the left side of the fuselage. The two Guppies transported 11 of the 13 major Saturn Apollo components for 90 percent of the moon program missions including the command, service and lunar modules. The fuselage of the C-5A or Boeing 747 could pass through the fuselage of the Pregnant Guppy or Super Guppy with room to spare.

Conroy moved to Santa Barbara where he built two more Guppies. These were smaller versions and were called Mini-Guppies. The first Mini-Guppy, completed in just six months, flew to the Paris Air Show only two hours after its maiden flight. The second Mini was the first of the Guppies to have an accident. It was powered by turboprop engines and crashed fatally on a certification flight at Edwards AFB. By this time Conroy had sold the company and retired with the profits to scheme on other plans.

The company constructed huge new hangars at Santa Barbara Airport. They produced two more Guppies for France. These were the largest of the breed and are used to haul parts for the A.300 Airbus and the Concorde program. The company also operated the remaining Guppies on contract work. Unfortunately, times changed. With the wind down in the aero-space business, the Guppies found themselves unwanted and Aero Spacelines went out of business on New Year's Eve of 1973.

The Guppies have been pushed inside the massive hangar and their fate is uncertain. It is hoped that at least one will be given to a museum. The Guppies certainly left a unique mark on aviation history and those that saw them will not forget their majestic size as they flew through the air carrying the equipment that put men on the moon.





# MUSTANG

(Text continued from page 39)

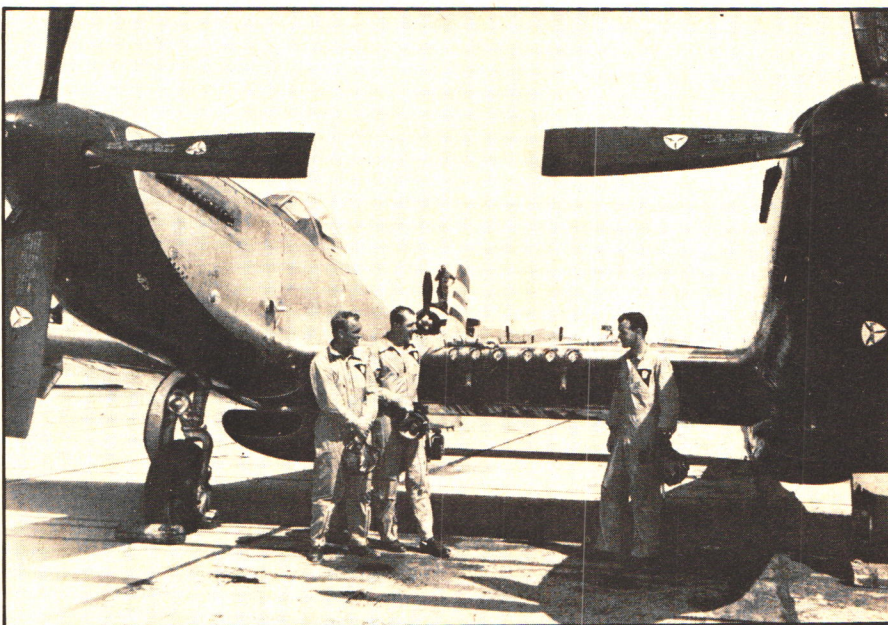
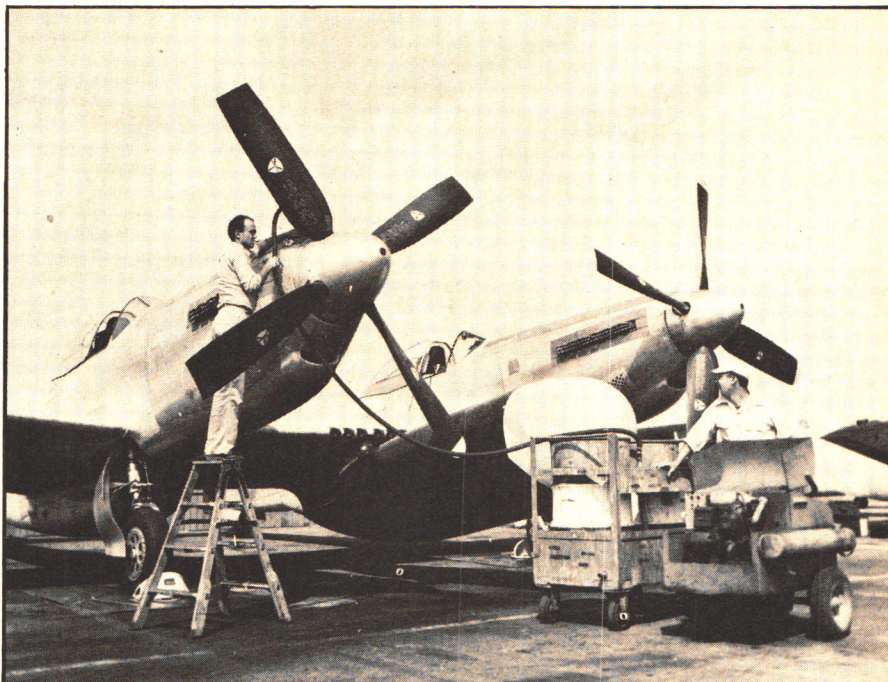
When used, these launchers were loaded with five 5-inch high-velocity aircraft rockets (HVARs) apiece. The HVARs could be launched singly, in pairs, or over a 2.3-second period in automatic sequence.

In addition to the normal range of bombs, rockets and auxiliary tanks, the bizarre pod which had been tested on the P-82B could be installed on the stub. This contained an additional eight .50-caliber guns, with 400 rounds apiece, and could be dropped if circumstances warranted it by the pilot. A reconnaissance pod had been proposed, as had a torpedo rack, but currently available information does not indicate whether these proceeded beyond the project stage or not.

A total of 250 Allison-powered P-82s were ordered as part of the fiscal year 1946 military budget, divided between day and night fighters. One hundred P-28Es, intended to be used for long-range bomber escorts and as fighter-bombers, were included; given the company designation NA-144, they were assigned Army Air Force serials from 46-255 through 46-354. A second group of 91 aircraft, equipped with APS-4 airborne-interception radar sets, was delivered under the designation P-82F; North American's Model NA-149, these were given serials between 46-405 and 46-495. The third variant, the P-82G, was also a night-fighter, but used an SCR720 set rather than the APS-4; the Gs were delivered in two groups: an initial run of nine aircraft, still designated NA-149s by North American, with serials from 46-496 through 46-504; and a second lot of 50 NA-150s, 46-355 through 46-404.

The night fighters had been ordered for the Air Defense Command, and were intended to replace the obsolescent Northrop P-61 Black Widows which had been the only aircraft with all-weather and night-flying capabilities available following the end of the war. These were eventually to serve with nine Fighter All-Weather Squadrons, stretching the relative handful of Twin-Mustangs virtually to the breaking point. The P-82Es, on the other hand, went to three squadrons in a unique Fighter Escort Wing, the 27th, which was part of the Strategic Air Command—possibly the only example of a major command organizing its own escort force, rather than drawing on conventional units, in this case those of the Air Defense Command and Tactical Air Command.

**A night fighter, fitted with the radar pod but still unpainted. Temporary blindness from exhaust glare was a hazard which North American designers got around by fitting curious baffles around the sack. The line crewmen are filling the plane's water injection system reservoir.**



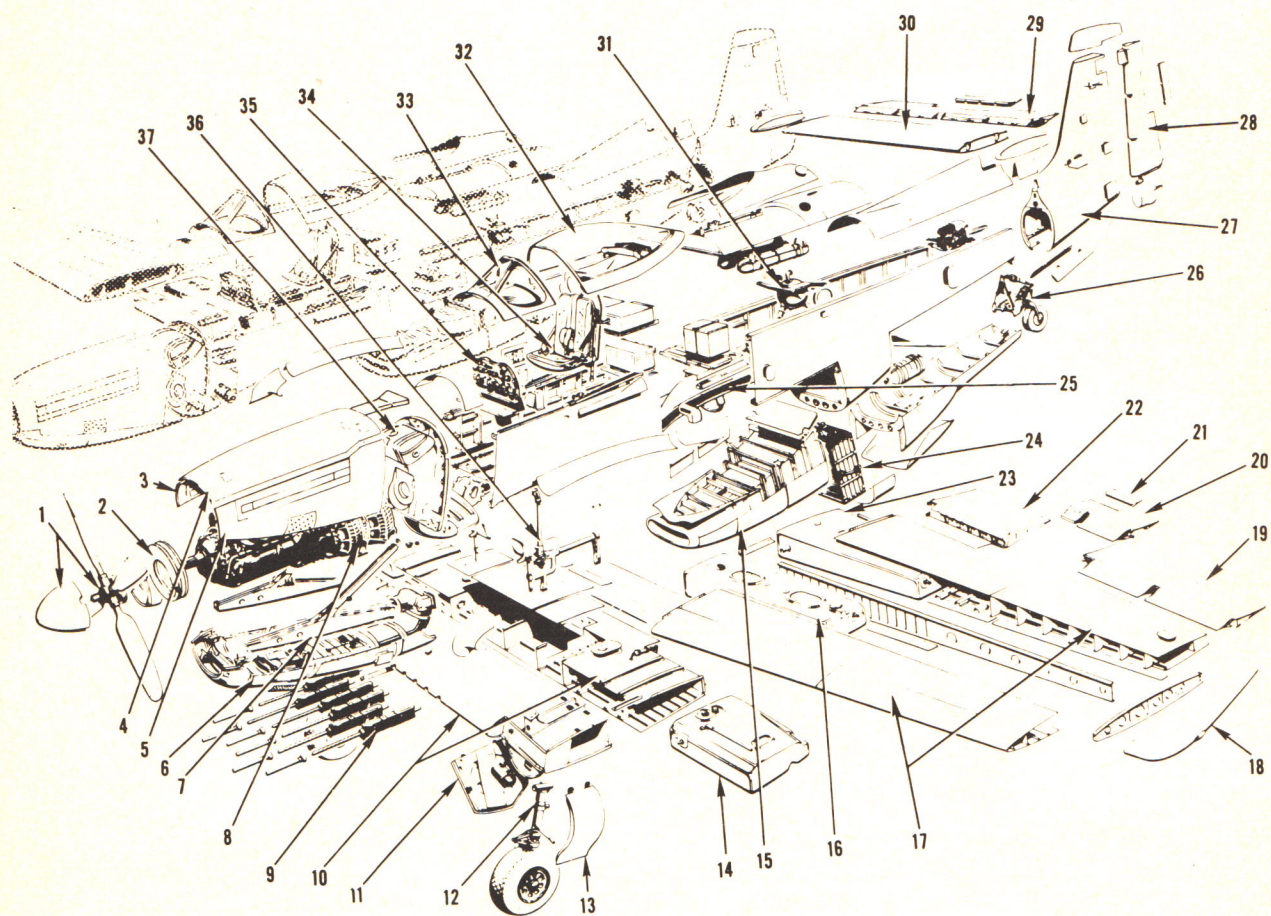
**Another 27th Fighter Escort Wing F-82E. This Wing was organized within the Strategic Air Command, a move virtually unique in the U.S. Air Force. The center-section stores pylons are apparent in this view, as are the "handed" propellers. Again, the unit is not identified, but note the trim bands on the tail, and the bright red areas on the cowlings.**

Despite fearsome unit insignias and colorful paint jobs the Twin-Mustangs, redesignated F-82s in June of 1948 as part of the new United States Air Force's facelift, seemed doomed to spin out their time as stopgaps until replaced by F-86s and F-94s, then perhaps to share the fate of their P-51D cousins and serve with Air National Guard units until finally

declared obsolete and disposed of. Whatever the reason, their numbers dwindled with startling speed and by the spring of 1950 only 168 remained in the Air Force inventory. Three squadrons, divided between the 5th and 20th Air Forces, made up the only effective all-weather defenses for the bases scattered from Taiwan to Hokkaido. Suddenly, this tiny force was in the spotlight.

The dawn of the 26th saw the evac-





- |  |   |
|--|---|
| 1. Propeller and Spinner Installation          | 19. Aileron (Outboard Section)                    |
| 2. Cowling Frame and Air Seal                  | 20. Aileron (Inboard Section)                     |
| 3. Side Cowling Assembly (RH)                  | 21. Aileron Trim Tab                              |
| 4. Upper Cowling Assembly                      | 22. Outer Wing Panel Flap                         |
| 5. Side Cowling Assembly (LH)                  | 23. Outer Wing Panel Rear Fuel Tank               |
| 6. Lower Engine Cowling and Air Scoop Assembly | 24. Coolant Radiator Assembly                     |
| 7. Engine Mounts                               | 25. Heater Assembly                               |
| 8. Left Engine Installation                    | 26. Tail Wheel Assembly                           |
| 9. Wing Center Section Gun Installation        | 27. Fuselage Tail Section and Vertical Stabilizer |
| 10. Wing Center Section                        | 28. Rudder Assembly                               |
| 11. Main Landing Gear Wheel Door               | 29. Elevator Assembly                             |
| 12. Main Landing Gear                          | 30. Horizontal Stabilizer Assembly                |
| 13. Main Landing Gear Shock Strut Fairing      | 31. Engine Coolant Expansion Tank                 |
| 14. Wing Center Section Fuel Tank (LH)         | 32. Cockpit Canopy                                |
| 15. Air Scoop                                  | 33. Windshield                                    |
| 16. Outer Wing Panel Front Fuel Tank           | 34. Seat Assembly                                 |
| 17. Outer Wing Panel                           | 35. Instrument Panel Assembly                     |
| 18. Wing Tip                                   | 36. Control Stick Assembly                        |
|  | 37. Oil Tank Assembly                             |

120-00-381D

**Figure 1-3. Exploded View of Airplane**

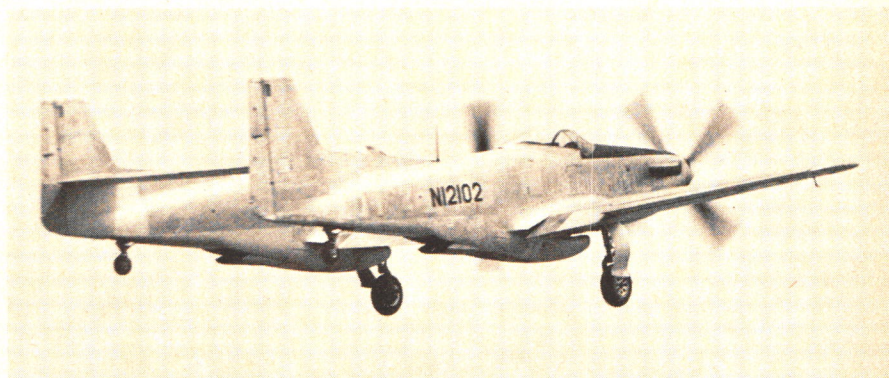
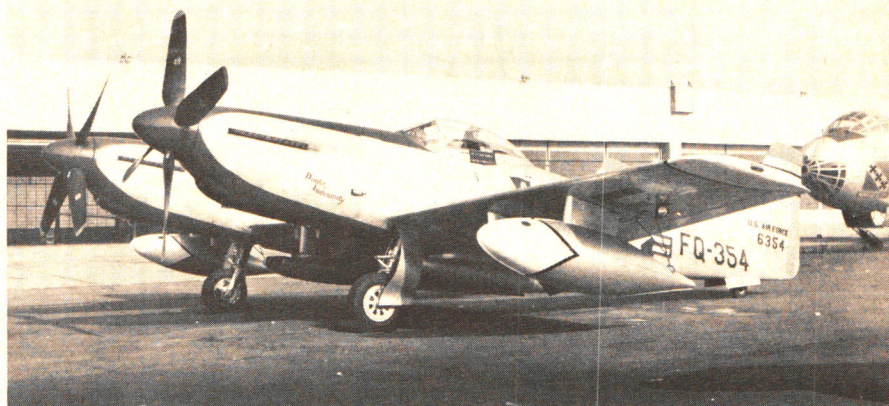


uation already underway, with civilians crowding aboard the "Reinholte," happy to be on anything which might get them out of Korea, regardless of what it might have brought in. F-82s from the 68th and 339th wove about overhead, on the lookout for enemy aircraft, but still under order not to engage unless they, the ship, or incoming convoys of civilians were actually attacked. The flight of four aircraft drawn from the 68th was alerted by a controller on the ground that more trucks were on their way from Seoul to the harbor, and headed inland to make certain that they arrived safely while a quartet of 339th planes stayed over the embarkation point.

Patrolling between the city and harbor, the high section of two F-82s from the 68th found itself being stalked by a pair of North Korean fighters, identified at the time as Lavochkin La-7s, one of the best Russian machines of World War II. The Red fighters whipped into firing passes, having the American crews at a temporary disadvantage since they could not make a move until they knew what the enemy pilots had in mind, but fired too far out and too soon, overshot, and refused to come up after the F-82s, which had pulled for the clouds as soon as they could get away from the Lavochkins. Since the attack had not been pressed home, and there appeared to be no danger to their charges on the ground, the Americans did not attempt to re-engage and the balance of the patrol passed uneventfully. By that afternoon loading was completed, and the "Reinholte" sailed with 682 people aboard, tucked into every possible space. B-26s and Navy destroyers took over the job of shepherding the waddling freighter, and eight very relieved crews headed for Itazuke, hot showers, and long-overdue meals. Other ships left Inchon that same day, bringing an additional 223 evacuees away from the advancing North Korean forces, now occupying positions only 17 miles away from the capitol, Seoul.

Despite the success of the sea-borne operations, even more non-essential personnel had been rousted out, and now 851 of these had to be considered. With the ships gone, an airlift was the only possible avenue open, but the aircraft assigned to fly these missions were no longer available. The Americans' luck held, however, two of the wandering 374th C-54s were tabbed for the next day's operations, reinforced by eleven C-47s from various commands, and this motley collection squatted on the ramp at Itazuke, crowding the facilities even more.

One of the 27th Fighter Escort Wing F-82Es, 46-354. Three squadrons made up the Wing, the 522nd, 523rd, and 524th Fighter Squadrons. The Wing insignia is painted under the cockpit: a shield in blue and gold, with a silver clenched fist on the blue half and a silver magnolia blossom on the gold (a glaring violation of the rules of heraldry). The Wing motto, "Intelligent Strength," appears on a scroll under the shield. There is no squadron designation visible on the plane, although the underwing fuel tanks, wingtips, and fins carry designs in some light color, possibly yellow since this is one of the three most commonly used distinguishing shades. The plane carries a name, "Double Indemnity," on the nose, possibly in red. The propeller spinner, lower cowlings, and roughly triangular areas running up to the antiglare panel are painted Insignia Red. (Brian R. Baker)



The Confederate Air Force's EF-82B, the only airworthy example of the Twin Mustang in the world, and one of the very few to survive regardless of condition. This view gives an excellent idea of just how strange the airplane really is. The original Air Force markings are still clearly visible as brighter patches of metal where the old paint had been stripped off. The plane was staked out on display at Lackland AFB for years, although the location was at least relatively secure. If it had been in civilian hands, at one of the supposed "museums," there is little doubt but that it would have been torn to pieces by the idly curious who have neither an interest in, nor any business being around, airplanes. (M. O'Leary)

Before first light on the 27th the transports left for Kimpo and a secondary field southwest of Seoul, Suwon. Loading was "catch-as-catch-can," and deteriorating communications added to the confusion at both fields, until it became a matter of each plane's crew announcing upon arrival at the Japanese bases just how many people were left to be flown out. The feelings of those on the ground in Korea can be imagined, each arriving plane being greeted as though its appearance were a minor miracle. It is a scene which seems straight out of "They Were Expendable," but without the assurance that, with the Duke on hand, everything could come out all right . . . at least for the major characters!

Communist observers, out ahead of the main body of the invasion force to pick artillery targets, could hardly

help seeing the stream of United States aircraft lumbering in and out of Suwon and Kimpo airfields. The call went out to fighter and fighter-bomber units north of the Parallel, and around noon a flight of five North Korean aircraft appeared over Seoul, headed for Kimpo . . . and right into the arms of an equal number of F-82s, from the overcrowded 68th and 339th.

There is still some uncertainty as to who shot first, and who should really be credited with the first victory. Having been given the order, "No interference . . . will be toler-

(Text continued on page 78)



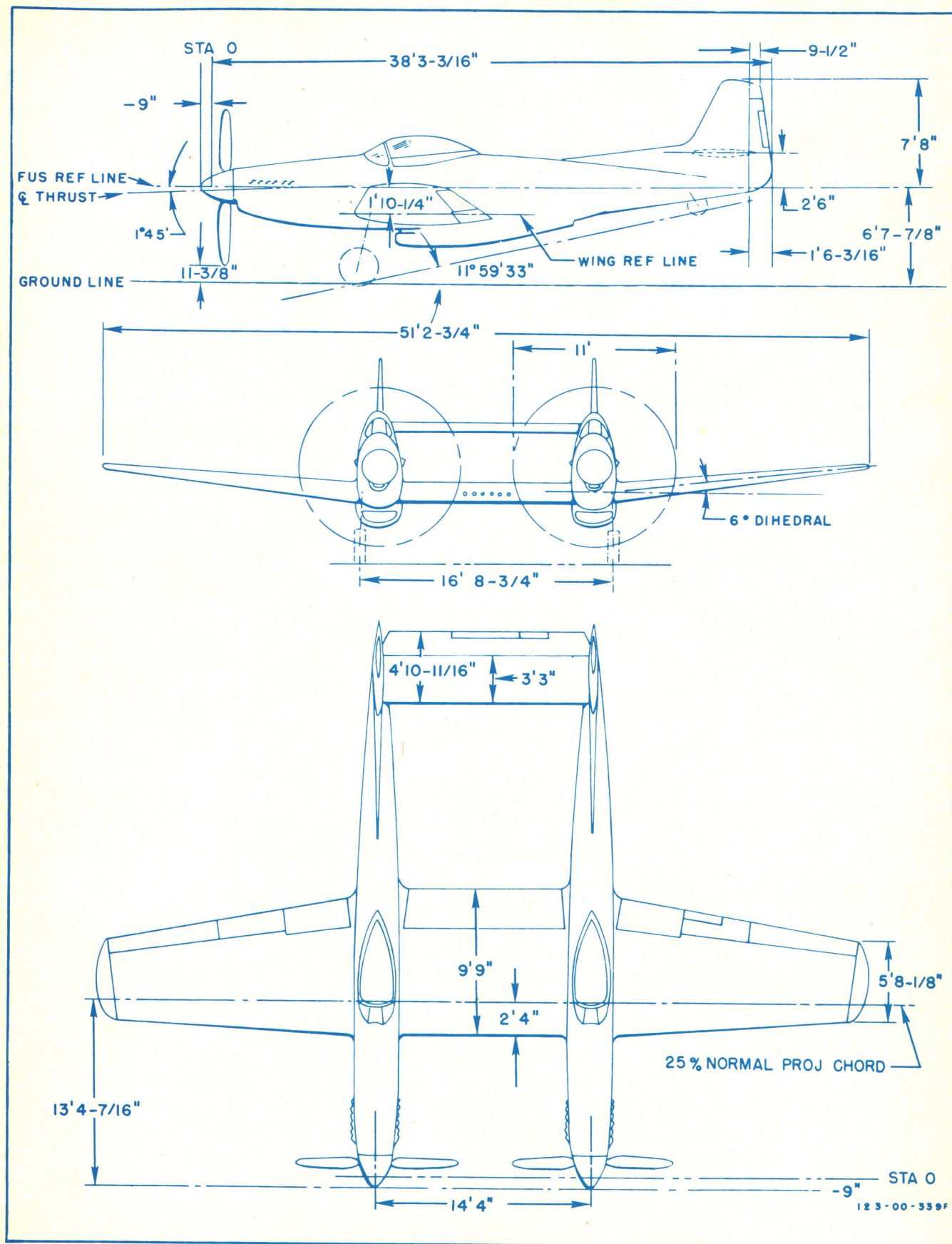
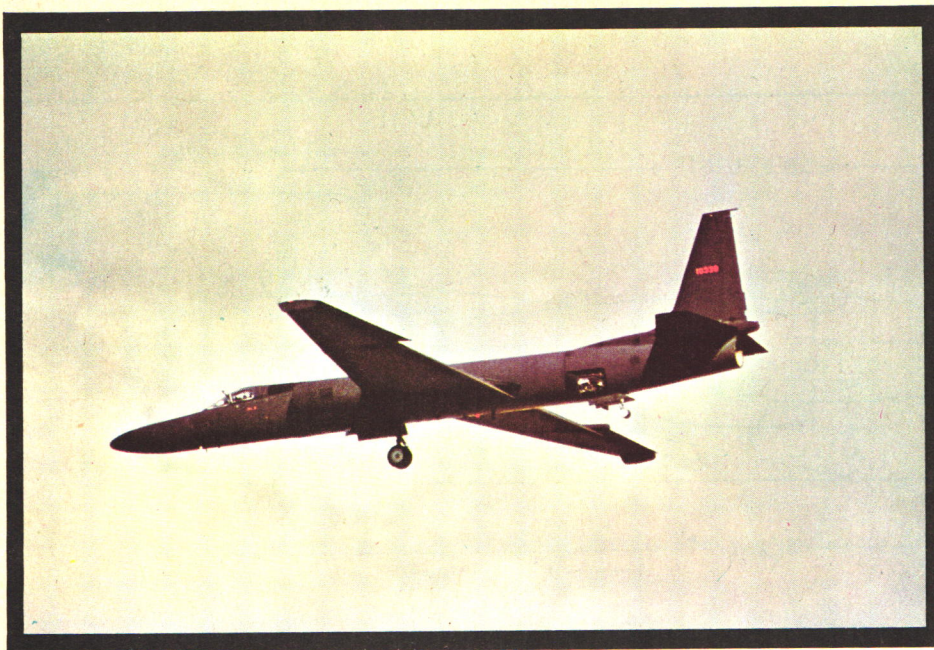
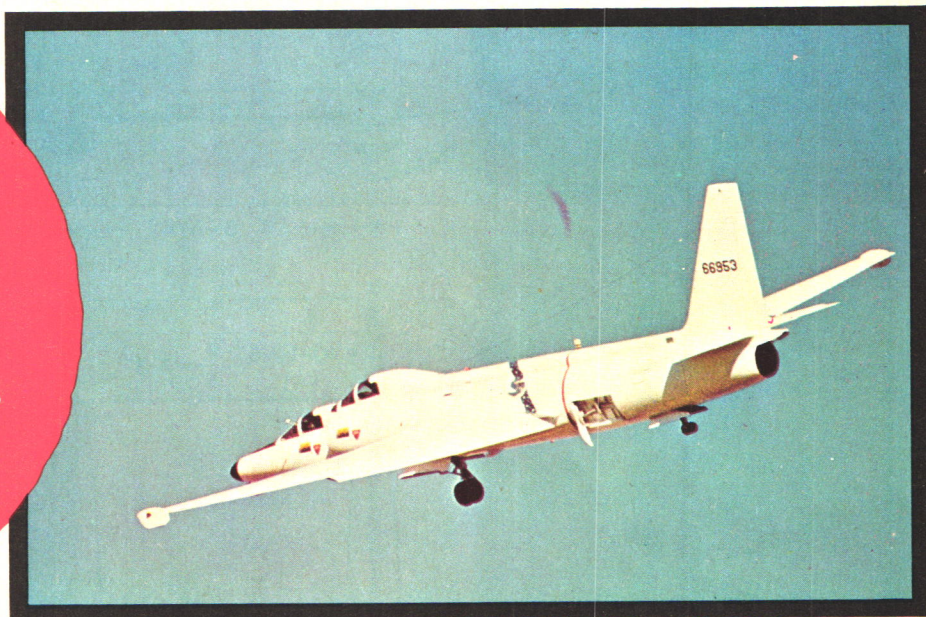


Figure 1-1. Airplane Dimensions

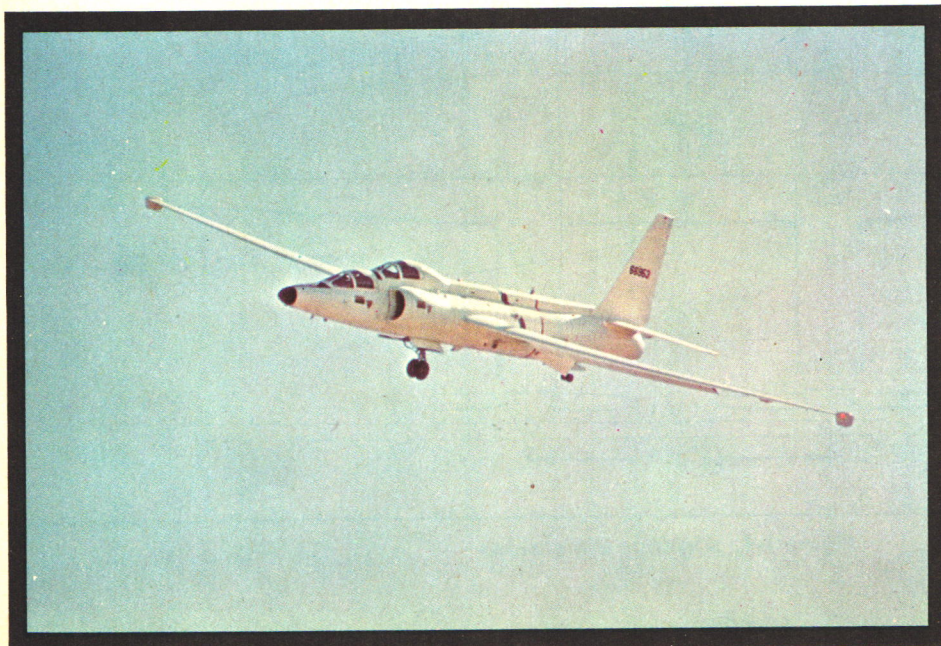




The flat black paint on this U-2R gives a rough finish that enhances its sinister look. The total absence of national markings is also noteworthy.



The TU-2C turning in for the base leg during landing. The extra cockpit is very apparent in this photo. Note the flexing in the long thin wings.



According to rumors, 66953 was built up from two wrecked U-2s, the added cockpit coming off one of the damaged aircraft. The large Strategic Air Command badge is noteworthy.



**O**F ALL THE curious machines which have lurched into the air (or tried to) few are as bizarre, or as wrapped in rumor and conjecture, as the innocuously-designated Lockheed U-2. A product of Kelly Johnson's Burbank "Skunk Works," the plane was known only from a few sightings until the wraps came off with a vengeance.

The first inadvertent unveiling occurred in 1959, when an unmarked all-black "spook" bellied in athwart a busy highway in Japan. As often happens, a photographer was on the scene and began cranking off frames until the U.S. Air Force security police arrived, accompanied by a number of "civilians," to chase the onlookers away. The photos duly appeared in the Japanese aviation magazine, **Aireview**, under the title "Mysterious 'Black Angel,'" with the result that Lockheed grudgingly sent

*...and you  
thought  
they weren't  
building  
the U-2  
any more?*

LOCKHEED'S MOST NOTORIOUS DESIGN IS STILL EARNING ITS KEEP. **AIR CLASSICS** HAS OBTAINED EXCLUSIVE PHOTOGRAPHS OF THE TWO NEWEST VARIANTS OF DESIGN WHOSE PAST ACCOMPLISHMENTS SURPASS THOSE OF JAMES BOND. OFFICIAL POSITIONS RANGE FROM "NO COMMENT," TO "FRANCIS GARY WHO?," SO READERS ARE LEFT TO DRAW THEIR OWN CONCLUSIONS.

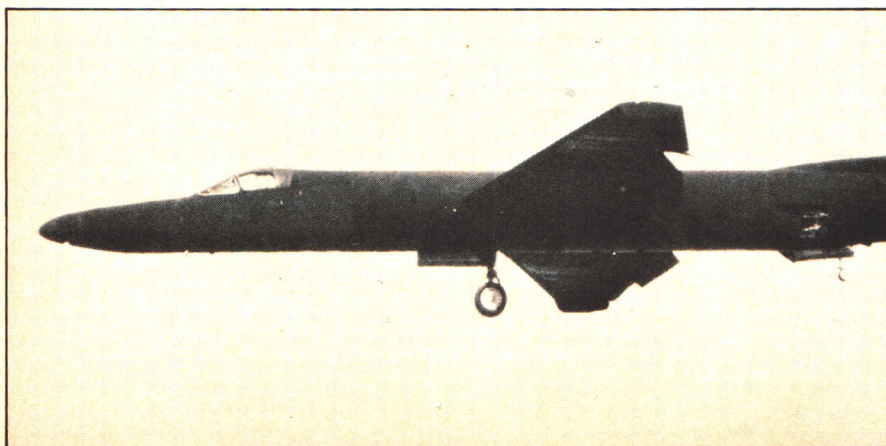
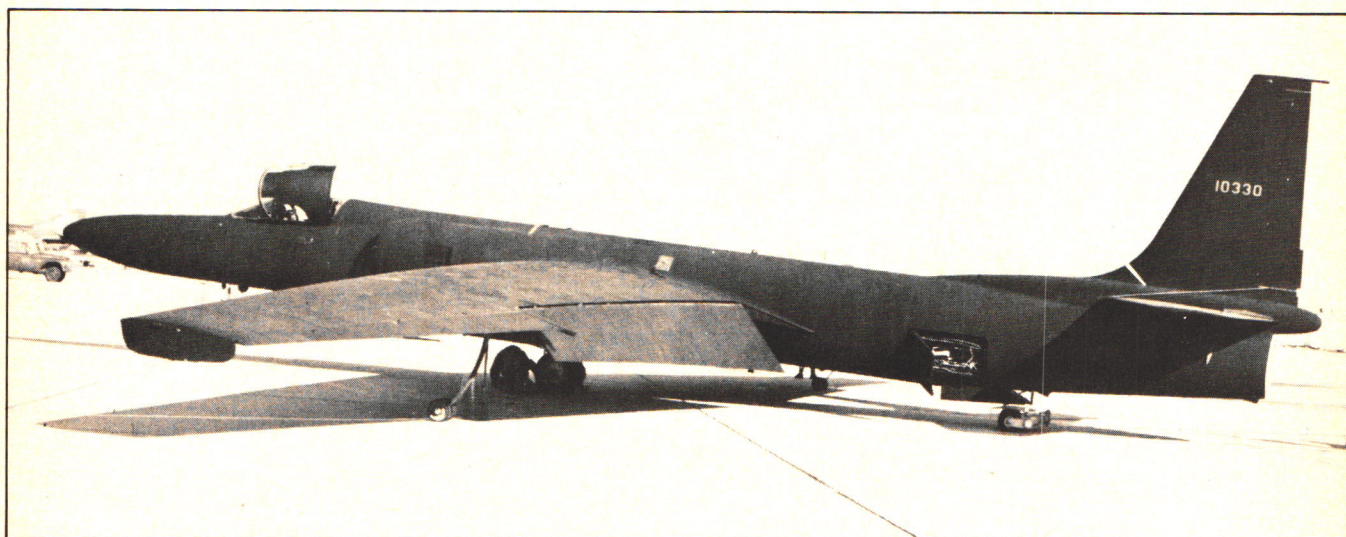
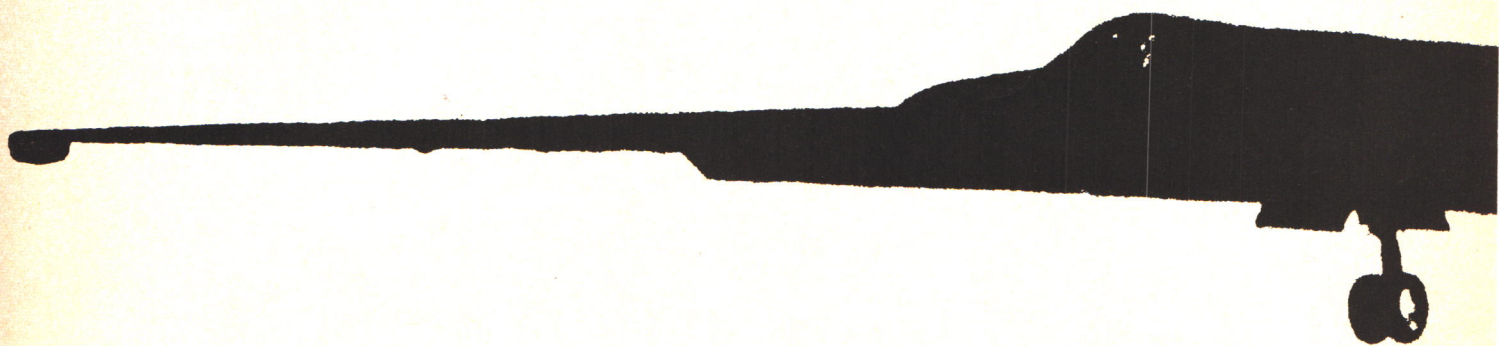
by Roy Townsend

out press kits to newspapers and magazines which identified the plane as one being used for "high-altitude" research.

Unfortunately for this cover story, and for American credibility, a SAM battery in Russia neatly clipped the wings of an intruder on May Day, 1960, dropping an airplane-shaped pile of junk and one bewildered pilot into the laps of officials at Sverdlovsk in the Urals. Francis Gary Powers, on a reconnaissance flight which originated in Pakistan, had had the effrontery neither to kill himself nor trigger a destruct system in his U-2 after its engine failed and it glided down to a point within range of the missiles. (U-2 pilots are rumored to have been of the opinion that the explosive package was not fitted with a delay, as they were assured it was, thus neatly canceling out any

(Text continued on page 62)

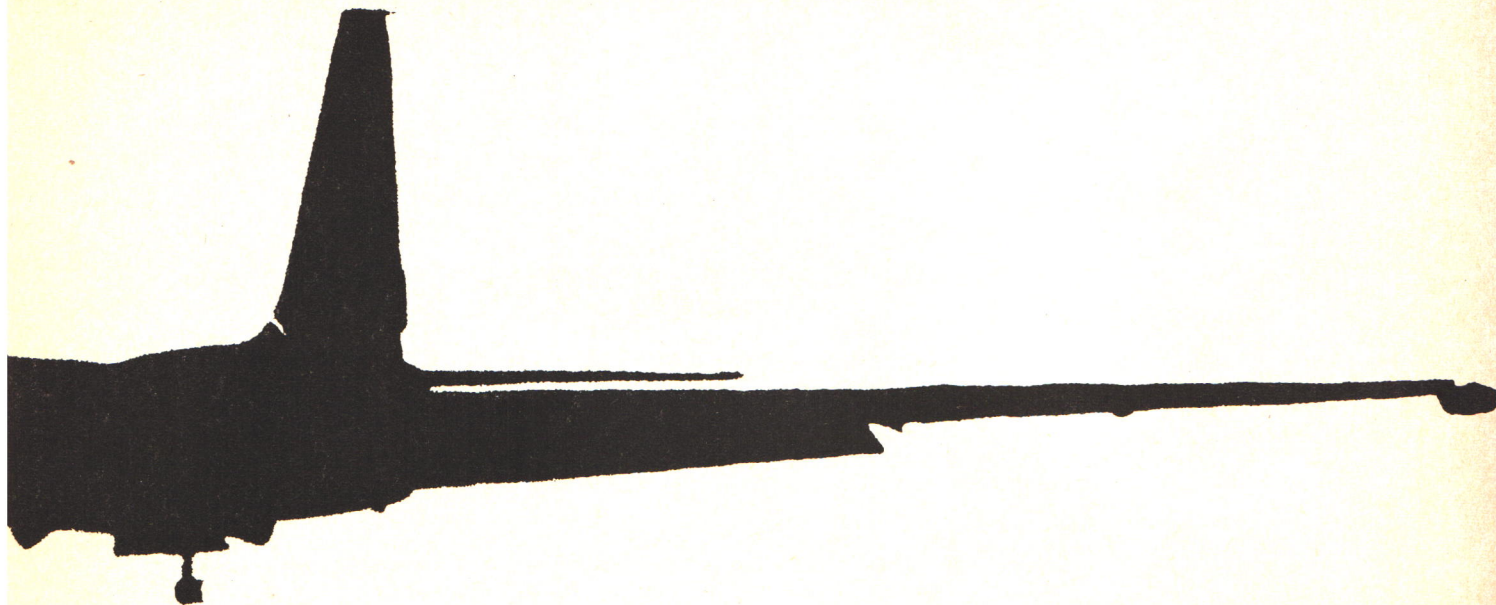




This half-rear view of 330 on the ramp shows the huge flap as well as the actuating plumbing for the air brake, which is in the full open position. The plane is still being positioned, a tow bar hitched to the aft landing gear, and the flexibility of the outriggers is apparent.

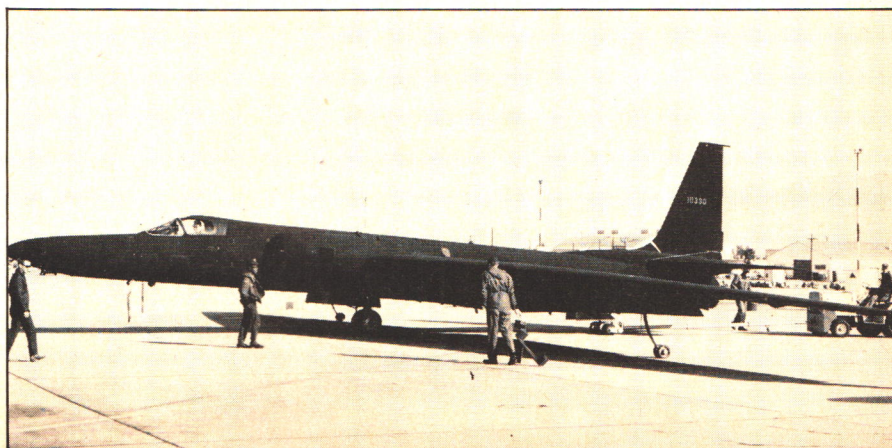
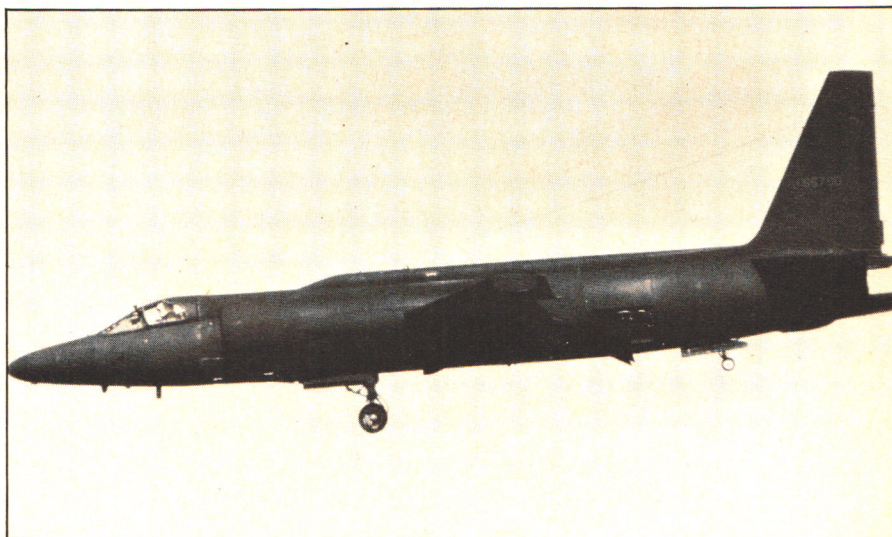
Too close for the telephoto lens to catch completely, this side view of 330 shows the elongated triangular wing planform to excellent advantage. The attachment points for the outriggers are again visible, as are the housings for the aileron push-rods. The air brakes and flaps are extended completely as the plane flares out less than one hundred feet off the ground.





A "conventional" U-2, one of fifty-five known to have been built at the Burbank "Skunk Works," final assembly taking place at Lockheed's Plant 42, the sometime commercial airfield located at Palmdale and administered by the Air Force. The U-2s fell into two identifiable groups, serial wise: 56-6675 through 56-6722, and 56-6951 through 56-6955. These account for fifty-three aircraft, leaving what may have been the prototypes unidentified at present. Model designations, while in common use, have little to back them up since they have rarely appeared on the aircraft themselves. This particular machine, 56-6700, has been modified with auxiliary fuel tanks built into the wing; a dorsal fairing which houses avionics; and a reconnaissance bay equipped with vertical, oblique and panoramic cameras.

How embarrassing! Another "plane that wasn't there," being set up for a static exhibit at Davis-Monthan AFB, where it was probably seen (and poked at) by tens of thousands of people. 61-330, the same plane which was photographed over the fence, could hardly be regarded as a "secret" after this show. The exact function of the large louvered panel installed in the outer skin of the air intake is unknown at present. Two pitot heads, forward of the cockpit, have been protected with removable canvas covers, each adorned with a bright red warning streamer, to frustrate one of the favorite games of the public: blowing into the vent to see what happens. The effect on the instruments of such an antic can only be catastrophic.

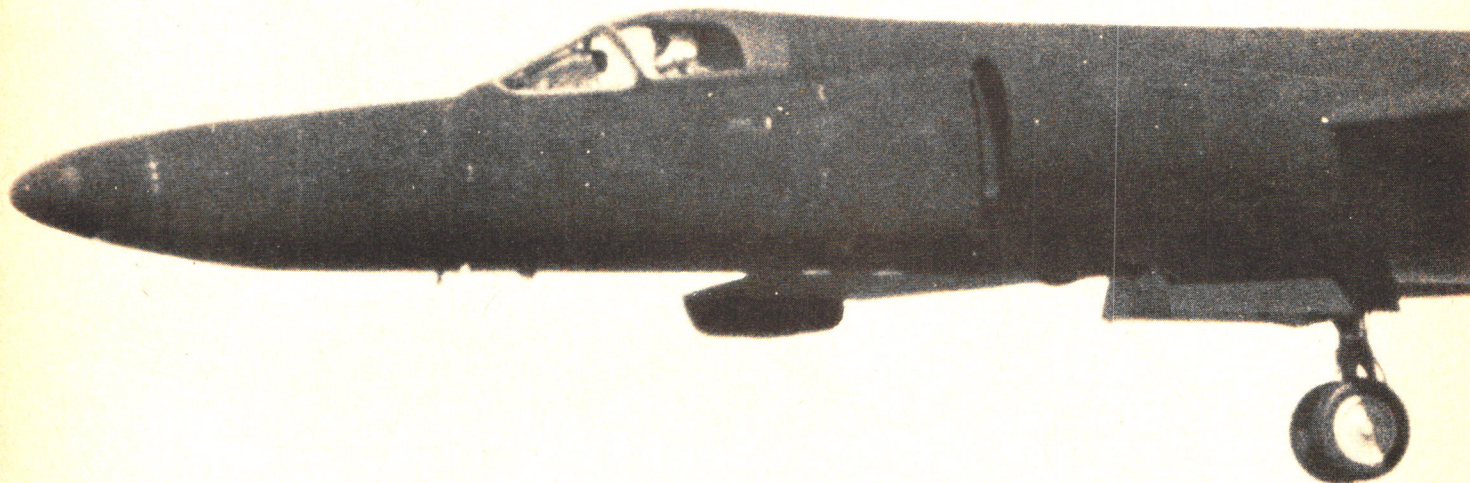






Heat rising from the Arizona desert blurs this view of 61-338, the only other U-2R identified by serial to date, as it taxis along the Davis-Monthan ramp following a mission. The outriggers have not been plugged into their sockets yet, indicating that it is moving fairly rapidly, since U-2s on the ground tend to fall off onto one

wingtip skid or the other as their speed drops off. Their service ceiling, like that of the WB/RB-57F, is so great that the pilots must wear full-pressure suits at all times, waddling from special vans to their planes carrying portable air conditioners similar to those used by the Apollo spaceship crews.



(Text continued from page 59)  
squeamishness caused by the idea of suicide.)

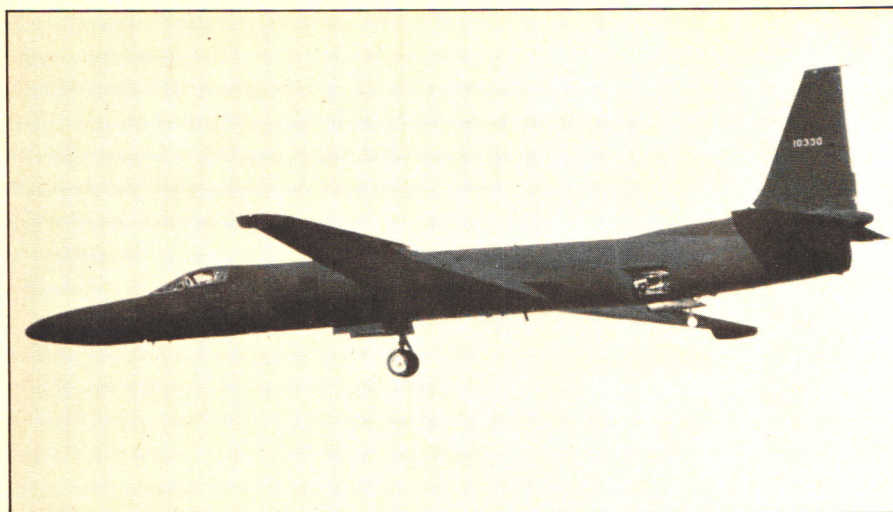
After Powers had been led into a news conference like a bear on a chain and put through his routine, being used afterwards as merchandise in a trade for a Soviet spy, there was no longer any logical reason for hiding the U-2 away, and the type soon became a regular attraction at air shows across the country. The low profile was now a matter of official policy, so the planes were once again "assigned to research projects," a pair eventually going to NASA and so putting the

most unimpeachable cachet of respectability on the type.

With the U-2 now firmly established as a "common" sight, its shape and dimensions familiar to the aviation enthusiasts and general public alike, the activities of a unit based at Davis-Monthan AFB, outside of Tucson, Arizona, attracted little attention. Its aircraft, U-2s painted black overall, slipped quietly in and out of the base. Photographers visiting the adjacent storage center tended to shrug them off as "only U-2s." Unfortunately they never thought to take a closer look.

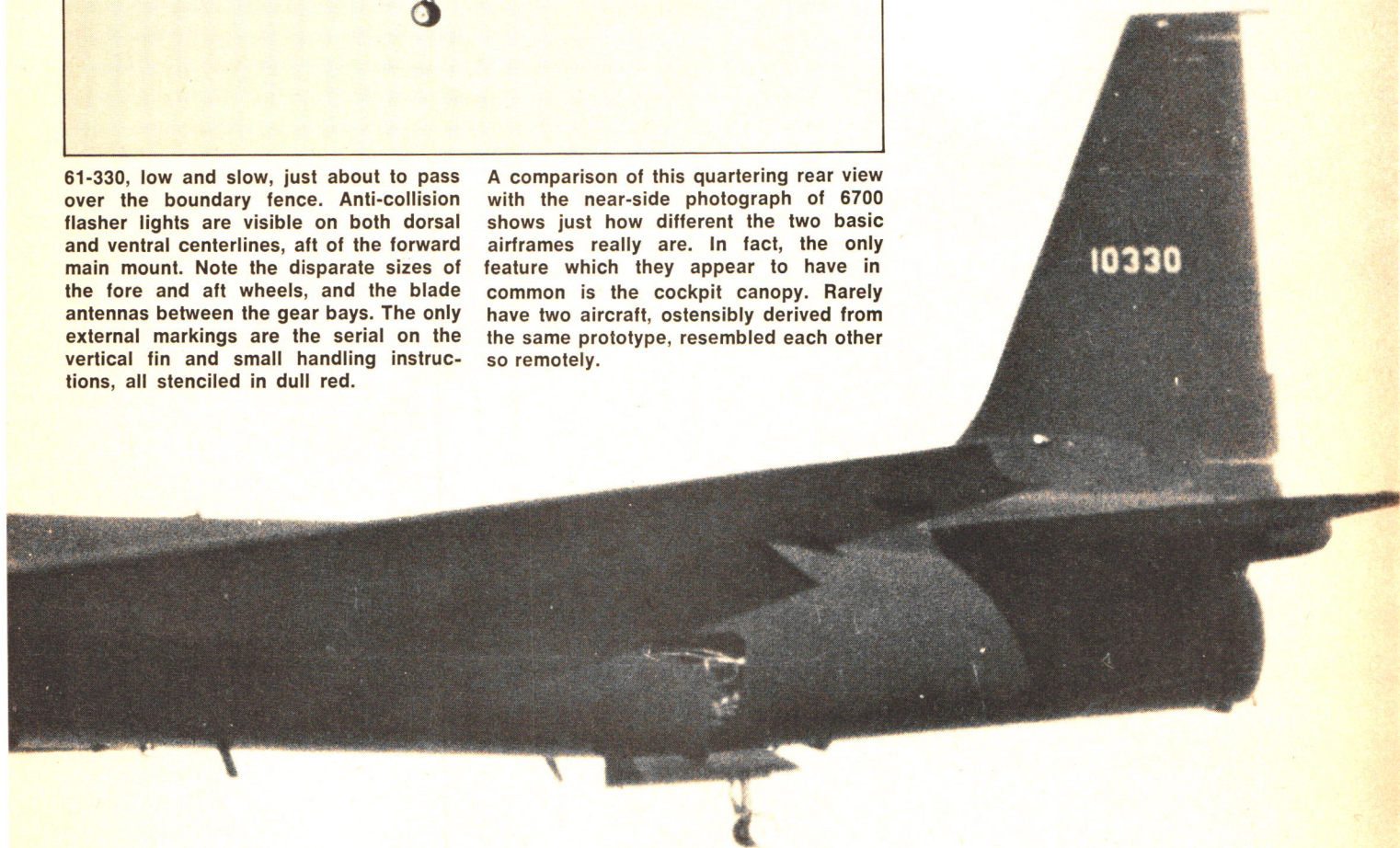
The Davis-Monthan U-2s have turned out to be the strangest variations





61-330, low and slow, just about to pass over the boundary fence. Anti-collision flasher lights are visible on both dorsal and ventral centerlines, aft of the forward main mount. Note the disparate sizes of the fore and aft wheels, and the blade antennas between the gear bays. The only external markings are the serial on the vertical fin and small handling instructions, all stenciled in dull red.

A comparison of this quartering rear view with the near-side photograph of 6700 shows just how different the two basic airframes really are. In fact, the only feature which they appear to have in common is the cockpit canopy. Rarely have two aircraft, ostensibly derived from the same prototype, resembled each other so remotely.



on the type imaginable. In fact, the only point they have in common with the earlier machines is the basic designation, these being called U-2Rs. Dimensions are completely different, and the two examples photographed to date are single-seaters while several of the surviving "conventional" U-2s have been modified to carry a second crew member. Despite the official reticence on the planes, one was (possibly inadvertently) put out on static display for an open house, making a point-blank study possible.

A second unusual variation on the basic theme is the subject of the

accompanying color plate. The TU-2C utilizes parts from two damaged single-seaters, and is used for pilot conversion training at Edwards AFB. The modification extends to the outrigger wheels, small flexible props under the wings which normally simply drop away as the plane takes off. In this instance, they can be permanently bolted into their sockets, and in effect play the part of "training wheels." It is anyone's guess as to what will be done to this amazingly versatile machine next. One thing we can be certain about, however, is that it won't be something we have seen before.



**G**REGORY "PAPPY" Boyington thought that the time to meet his maker had come. He had the throttle for the fuel guzzling R-2800 radial engine jammed as far forward as it would go in order to escape a swarm of 20 Jap fighters that had just sent his wingman plummeting in flames into the calm Pacific. Hugging the ocean, Pappy thought that he might just get away from the Japs when, without warning, a cone of tracers enveloped the Corsair and the massive fuel tank located in the fuselage ahead of the cockpit erupted in flames that poured over the canopy. Pappy knew that he was about one hundred feet off the water and he was aware that if he tried to gain

**Marine Corps ace  
Gregory "Pappy"  
Boyington had  
suffered a number  
of hardships during  
his flying life but  
none were to prove  
as hard as his last  
mission over Rabaul.**

altitude he would be roasted in a few seconds!

Dawn on 3 January 1944, on Bougainville had begun just like many others for Pappy Boyington. He eased himself out of a damp cot with his stomach in revolt and his head spinning like an N3N at cadet school. Pappy was suffering from a number of symptoms that plagued many Marine Corps pilots during those trying months of island hopping towards the heart of the Japanese empire.

He was worn out from fatigue and covered with, for the lack of a medical word, jungle crud. Running sores covered his armpits, chest and crotch and were so painful that when he found time to sleep he couldn't. Every morning his ears

would be sealed tight with caked pus and the medic would have to break the crust and blow sufa drugs into them with a straw. The medic hated to perform the painful daily operation but if he didn't, Pappy wouldn't have been able to hear a word over the radio; a dangerous liability when your wingman was screaming "Jap on your tail, Pappy!"

Pappy was worn out and he knew it. He was also worn out from the constant attentions of the war correspondents who badgered him on when he was going to break Eddie Rickenbacker's World War I record. Captain Eddie had sent 26 of the enemy for their final plunge and Pappy had sent 26 Japs riding flaming coffins on a one-way trip to meet their Emperor.

Just a few days before, a reporter had been bothering Pappy in the mess and he burst out, "God damn it, Pal, I thought I told you that when I did I would let you know and you aren't supposed to bother me in the meantime." A full plate of food happened to dump its contents on Pappy but he always claimed that this was an accident.

That dawn found Pappy stuffing down a breakfast of cold baked beans on the edge of the airstrip that the Seabees had built on a small chunk of land won in a bloody battle by the Marines. As Pappy shoveled the beans in he glanced over the rows of white crosses near the airport boundary, but they were too far away and it was too dark to read the names. He didn't really have to. He knew that each cross marked the final resting place of a Marine who had gone as far as he could in this mortal world.

Everything seemed to be wrong that morning. Pappy's regular Corsair wasn't operational and he had to switch to another. At the last minute, Pappy's ground crew got his regular bird running and he had to painfully unstrap from one cockpit and crawl into his familiar armor plated seat. He was to lead a fighter sweep over Rabaul, meaning two hundred miles over enemy infested skies and shark infested waters.

His wingman was Captain George Ashmun, a New Yorker. George had told Pappy before the mission: "You go ahead and shoot all you want Gramps. All I'll do is keep them off your tail." George knew that Pappy was under a lot of pressure to break the record.

After takeoff they cruised at 20,-







# *Pappy's Last Mission*

by Bob Edwards

000 feet over the ocean with only a few hazy clouds to block visibility. Suddenly, Pappy spotted a number of Jap fighters rising up to do battle. "Go down and get to work," he yelled to the rest of the flight over the radio.

George and Pappy dove first. Pappy poured a long burst into the first enemy that approached and a fraction of a second later he saw the Nip pilot catapult out and the plane began to fall apart.

A sharp voice cut through Pappy's painful ears, "Gramps, you got a flamer." It was George and that did it, Pappy wouldn't have to worry about that record anymore.

The pair roared down lower in search of more prey. Pappy figured that the rest of the flight would follow them down, but the remaining aircraft had been cut off from seeing Pappy's dive by a large cloud formation. George and Pappy did not pay too much attention to the increasing clouds and they figured that the rest of the group would be following momentarily. They were wrong.

The two Corsairs roared into a swarming group on ten enemy fighters who were anxious to avenge their comrade's death. Pappy and George opened up with their combination of twelve .50 caliber machine guns just as Pappy noticed a large group of aircraft diving down behind him. Turning to see the rest of his Corsairs enter the fight, his blood momentarily froze when he saw that they were Japs! George and Pappy flew their Corsairs in the traditional thatch-weave, protecting each other's blank spots. Pappy saw George fire a long burst into a Zeke that began to glow like a Christmas tree as it turned belly up and began the long plunge into the mouths of the hungry sharks that populated this particular chunk of the Pacific. A few seconds later Pappy sent another Jap on a long final dive with perhaps just enough time for the pilot to ponder on the attributes of his Emperor's policy of aggression.

Pappy was horrified to see George's Corsair shudder and emit a trail of smoke. The big Corsair went into a glide and the hungry Japs gathered around the damaged craft. Pappy could sense that something was horribly wrong. He screamed over the radio, "For God's sake, George, dive!"

Pappy knew that the Corsair could outdive just about any enemy air-



craft except the Tony, but apparently George never heard Pappy or could do nothing about it. The Corsair continued its slow glide.

Time and time again Pappy screamed at him: "For God's sake, George, dive straight down!" But there was no answer.

Pappy roared in behind the Nip planes that were shooting at his wingman on the way down toward the ocean. There were so many of them that Pappy was not even able to use his gunsight. It was strictly a matter of blazing away at the Zekes that swarmed directly in front of him. Pappy stamped on the rudder pedals, knocking the Corsair from side to side and spraying the darting fighters that were trying to finish off the wounded Corsair.

Suddenly, the same fate that had befallen George had enveloped Pappy. The impact of heavy slugs smashing into his armor plate threw him against the shoulder harness. Jap slugs were smashing into the Corsair with the sound of heavy hail on a tin roof. Pappy could see the enemy bullets punching strange patterns into the fabric wing panels.

George's plane burst into flames and a moment later crashed into the ocean. At that point there was nothing left for Pappy to do but get away.

Pappy threw everything in the cockpit all the way forward and nosed his Corsair over to pick up extra speed until the proximity of the ocean forced him to level off. He had gone practically one-half mile at four hundred knots when the main gas tank exploded in his face. Pappy later reported that the sensation "was much the same as opening the door of a furnace and sticking one's head into the thing."

There was only one thing for Pappy to do. He blew off the canopy, reached for the parachute rip cord with his right hand and released the safety belt with his left. He then put both feet on the stick and kicked it all the way forward. His body was given centrifugal force when he kicked the stick forward and he shot out of the Corsair's cockpit like a rocket.

There was a powerful jerk and his chute opened and almost instantly he slammed into the ocean.

The water around his head quickly took the dazed sensation away just in time to see the first of four Zekes begin taking turns strafing his very exposed position.

Pappy immediately started diving under the water and for the first few dives he could reach six feet, but this soon petered out to four and after a short while he could barely

duck his head under the water. The enemy pilots either ran out of ammunition or thought that his feeble efforts indicated that he was wounded and dying. In any event, after a considerable amount of strafing runs, the Zekes headed off for greener pastures.

After this harrowing experience Pappy could barely tread water and he knew that he was getting weaker and weaker. Pappy's survival kit featured a small package that contained a small inflatable rubber raft. He was afraid of taking the chance of opening the raft in case the enemy fighters would return rearmed from their base at Rabaul. With an open raft to use as a target he would have been a goner for sure.

Pappy's Mae West was inoperative and he knew that as he became weaker the grip of the ocean would grow stronger. After two hours of treading water with combat boots and fatigues dumped because of the excess weight, he knew he would have to use the raft. And if the life raft didn't work or in case it was shot full of holes, Pappy decided that: "It's au revoir. That's all there is to it."

He pulled the cord on the raft that released the bottle of compressed air and the small raft popped open and filled without a problem. After getting into the raft, no small problem for a weak man in a rolling ocean, Pappy decided to take stock of his situation.

He checked his Mae West, for if the Japs came back he wanted to make sure that it was in working order. He wanted to be sure that he could dive under the raft and rely on his life jacket to keep him afloat. Pappy had noticed some holes in the jacket so he opened the patching kit that came with the life raft. Inside the kit there were about 25 patches. Pappy decided to count the number of holes in the jacket before he started patching. The final count came to over two hundred! Pappy heaved the Mae West overboard for the fishes to play with.

After the discouraging experience with the Mae West, Pappy noticed that he was wounded. Apparently the danger and excitement of the situation had canceled out any feeling in his body, but now the pain was coming in waves and each wave was getting bigger.

Pieces of his scalp, with hair on the pieces, were hanging down in front of his face. His left ear was almost torn off. His arms and shoulders contained holes and shrapnel. He looked down at his legs and saw that his left ankle was shattered from a 20-millimeter cannon shell. The

calf of his left leg had a 7.7 bullet through it. In his groin he had been completely shot through the leg by 20-millimeter shrapnel. On the inside portion of the leg was a gash bigger than his fist.

Pappy began to talk to himself. He had nothing to do and lots of time on his hands. "I'll get out my first-aid equipment from my jungle pack. I'd better start patching this stuff up."

He even began talking to his watch which had been smashed by a bullet during the fight. "I'll have a nice long day to fix you up." Instead he spent about two hours trying to bandage himself as well as possible. It was a difficult job as the swell in the South Pacific that day was about seven feet high and the little raft could not stand still.

Pappy found that the raft was equipped with only one paddle instead of two, and this put rowing out of the question. Far to the south Pappy could see the shores of New Britain and far to the north were the shores of New Ireland. Pappy did not have the strength to try to get to either island so instead he sat back in the life raft and kept singing a little ditty that one of the squadron pilots had thought up: "On a rowboat at Rabaul, On a rowboat at Rabaul . . ."

After about eight hours of aimless drifting Pappy noticed the ocean to his right begin to boil with white foam. In a few moments the superstructure and conning tower of a submarine rocked in the water near his raft. He anxiously paddled towards the boat never thinking that it was anything but American, when he noticed a big red meatball glaring down from the side of the conning tower. Strange little figures in white were running down the top of his sub and grabbing for his raft. He was soon pulled on board by sailors clamoring in a language that he did not understand. Pappy was brought in front of the ship's captain, and a pharmacist's mate who knew some English did the translating. The captain informed Pappy that he was now a prisoner of Japan but he would be well treated aboard the submarine.

The sub stayed on the surface and steamed to Rabaul where Pappy was turned over to the Army who treated him very harshly. He was regularly beaten and his wounds festered to the point where he nearly died. With his rough constitution he was able to survive and he was eventually flown to a prison camp in Tokyo where he remained until the war ended. Pappy Boyington had flown his last mission.



# A Classic Aeroplanes

Col. Tinker, Commanding Officer of the 7th Bomb Group based at Hamilton, is shown flying over San Francisco in his personal Martin B-10B "Bird-O-Prey XIII." For Don Wright's complete story of Col. Tinker and his achievements be sure to read AIR COMBAT, Vol. 2, No. 1.

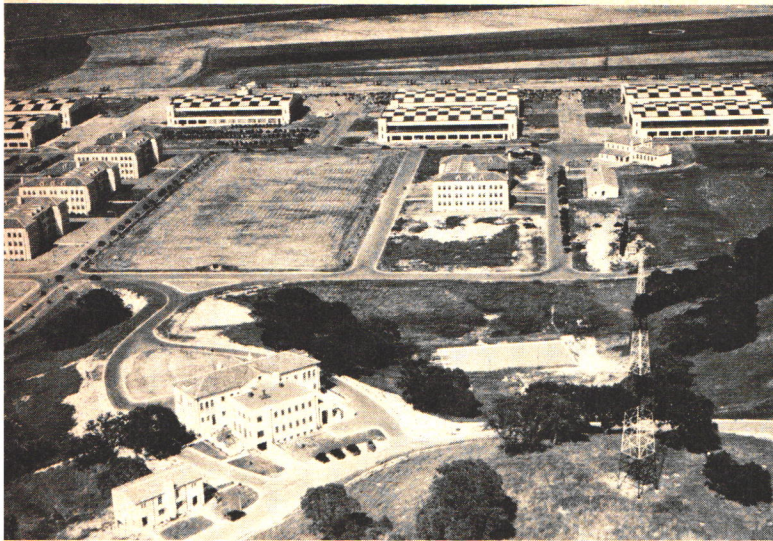


**San Francisco's Hamilton AFB was home to many of aviation's classic aircraft during the Army Air Corps' "Golden Age."**

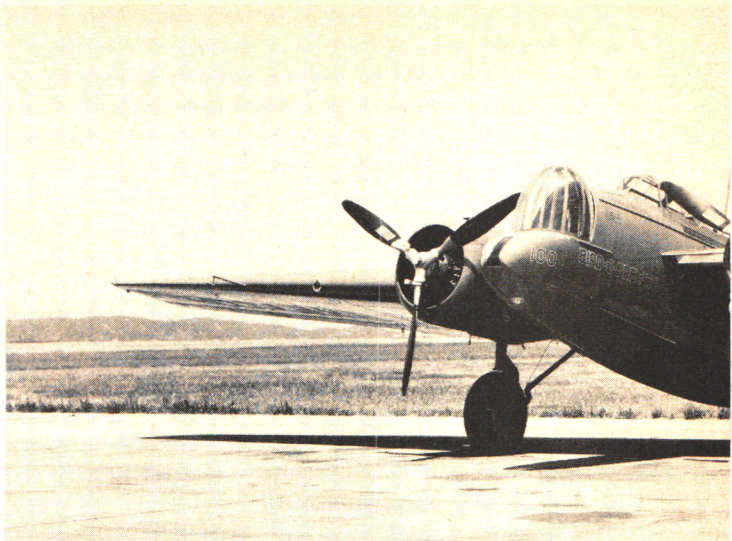
**by Michael O'Leary**

Photos from the collection of Don Wright

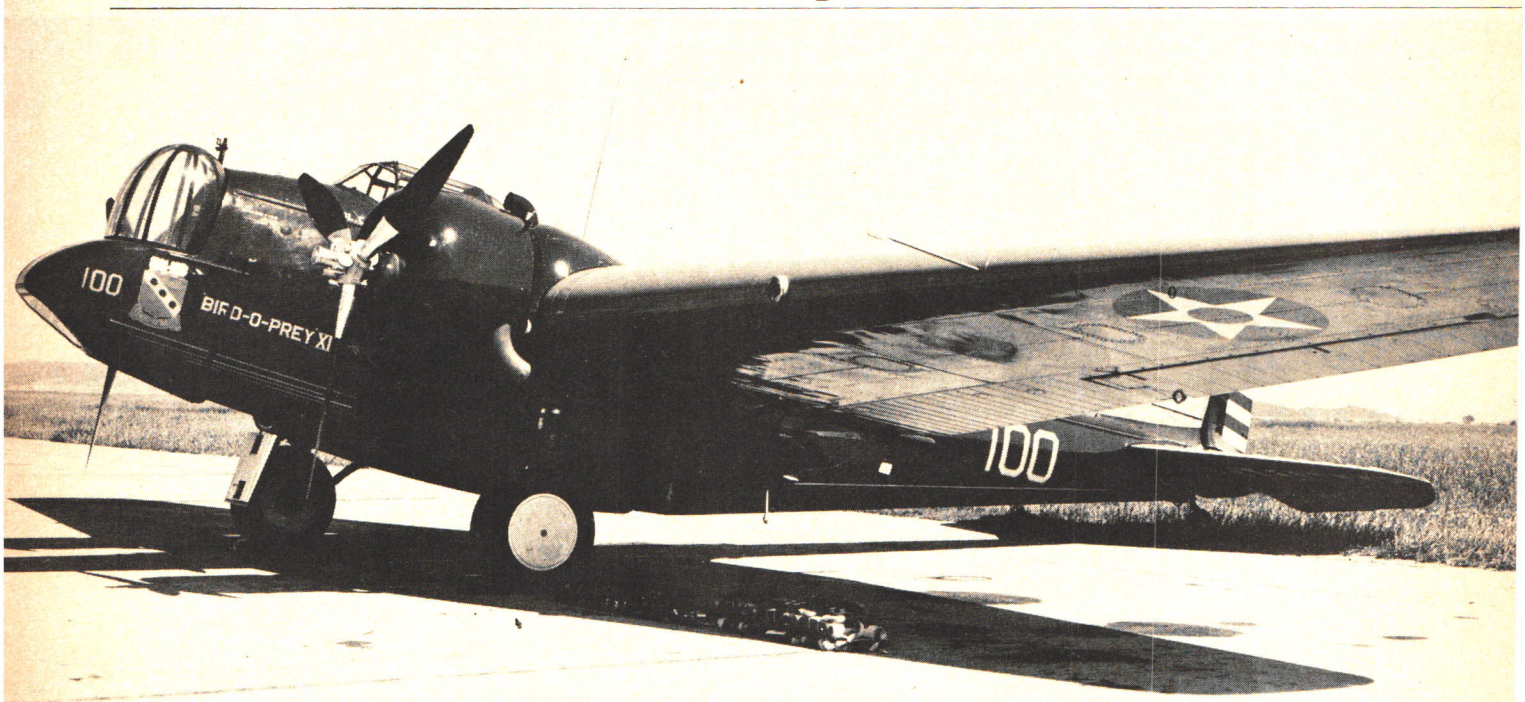




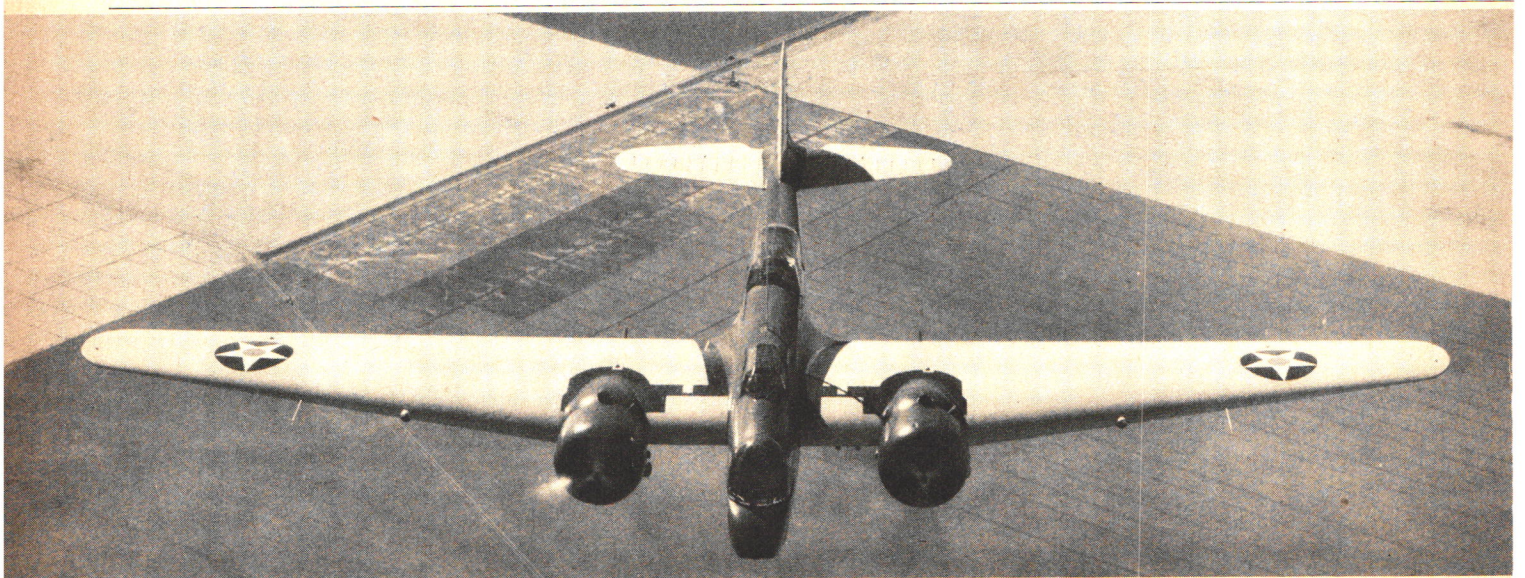
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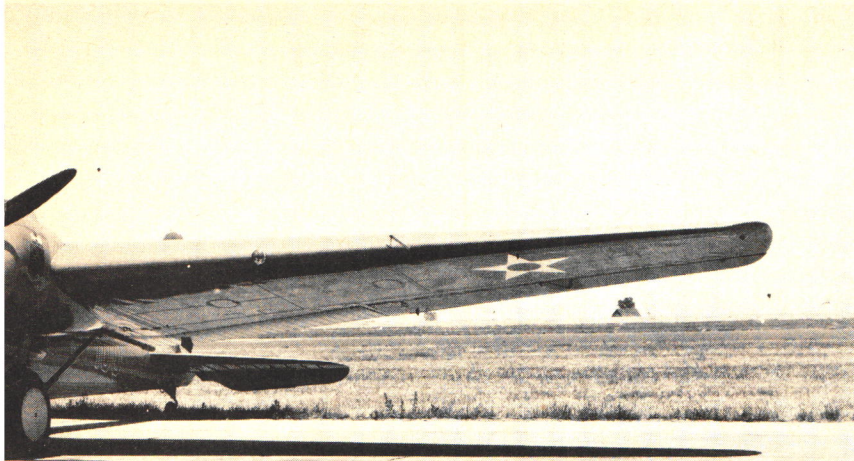


C



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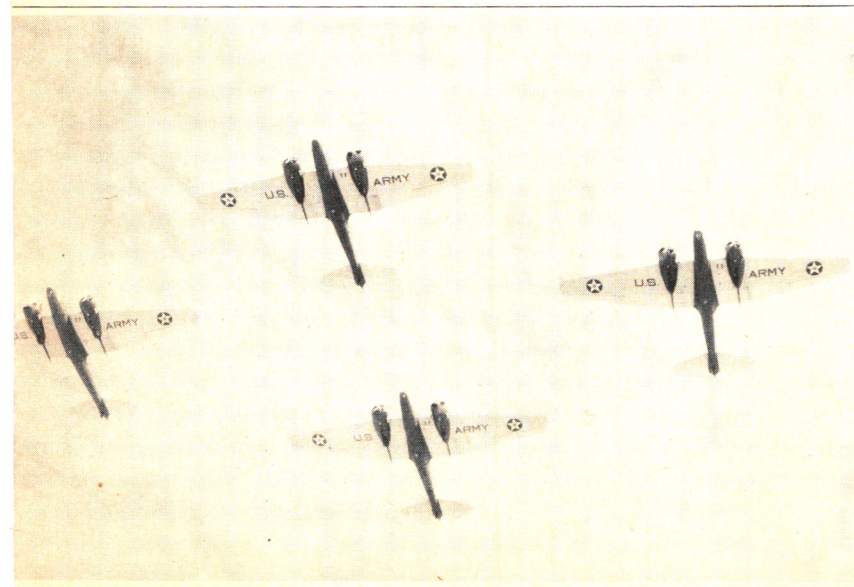




A Aerial view of Hamilton Field during the mid-1930s. The checkered hangars were atypical of the period. The administration buildings are shown in the foreground while a long row of Martin B-10 bombers are parked along the taxi-way.



B Col. Tinker's B-10B, s/n34-72, on the ramp at Hamilton. The B-10 boasted many features that were new to American bombers: movable turret, operating bomb bay doors, and retractable landing gear. The photo was taken at 1:00 p.m. on 11 June 1936 which gives some idea of the completeness of the recording methods of the Army photographers.



C 34-72 poses for another shot. Note how the different types of film affected the shades of the colors in the paint scheme. The B-10B was procured by the AAC during 1934 and 103 were manufactured. Power was provided by two Wright R-1820-33 radial engines and the top speed was 212 mph.



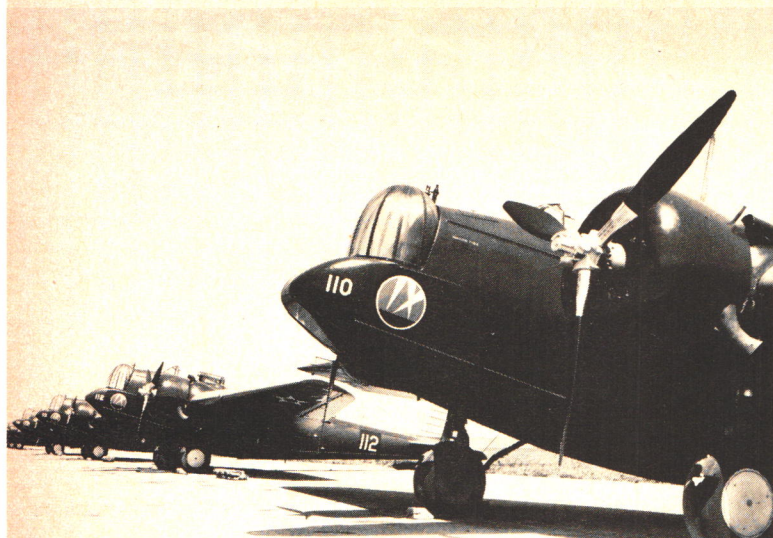
D General Hap Arnold flying his B-10B over the Marin County countryside. Many pilots were used to the open cockpits of earlier aircraft and the "newfangled" enclosed cockpits caused some doubts. General Hap apparently liked the open style of flying as evidenced by the cranked back canopy while the rear gunner went for the newer style.



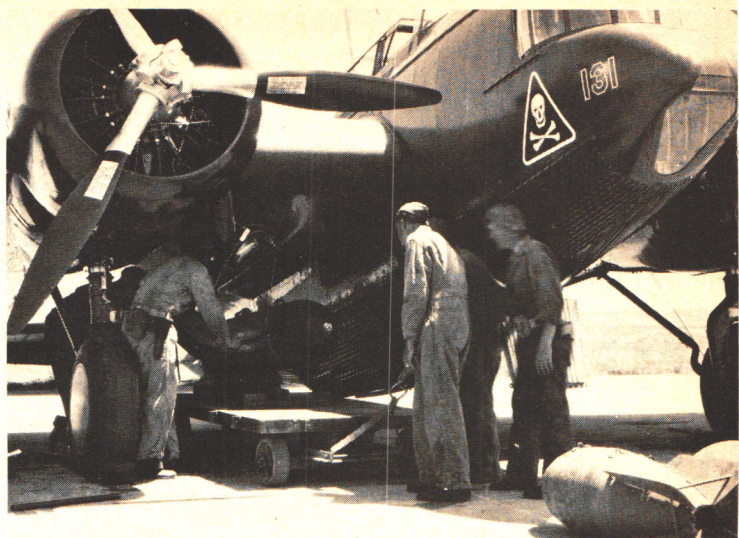
E The broad yellow wings of a B-10B slide over northern California farmlands. The B-10B carried a crew of four and had a wing span of 70' 6" and a length of 44' 9".

F Flight of B-10s over Hamilton Field.





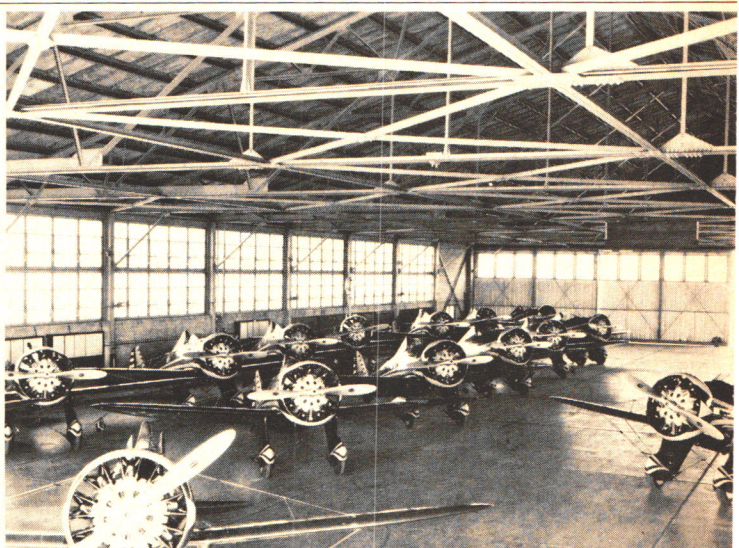
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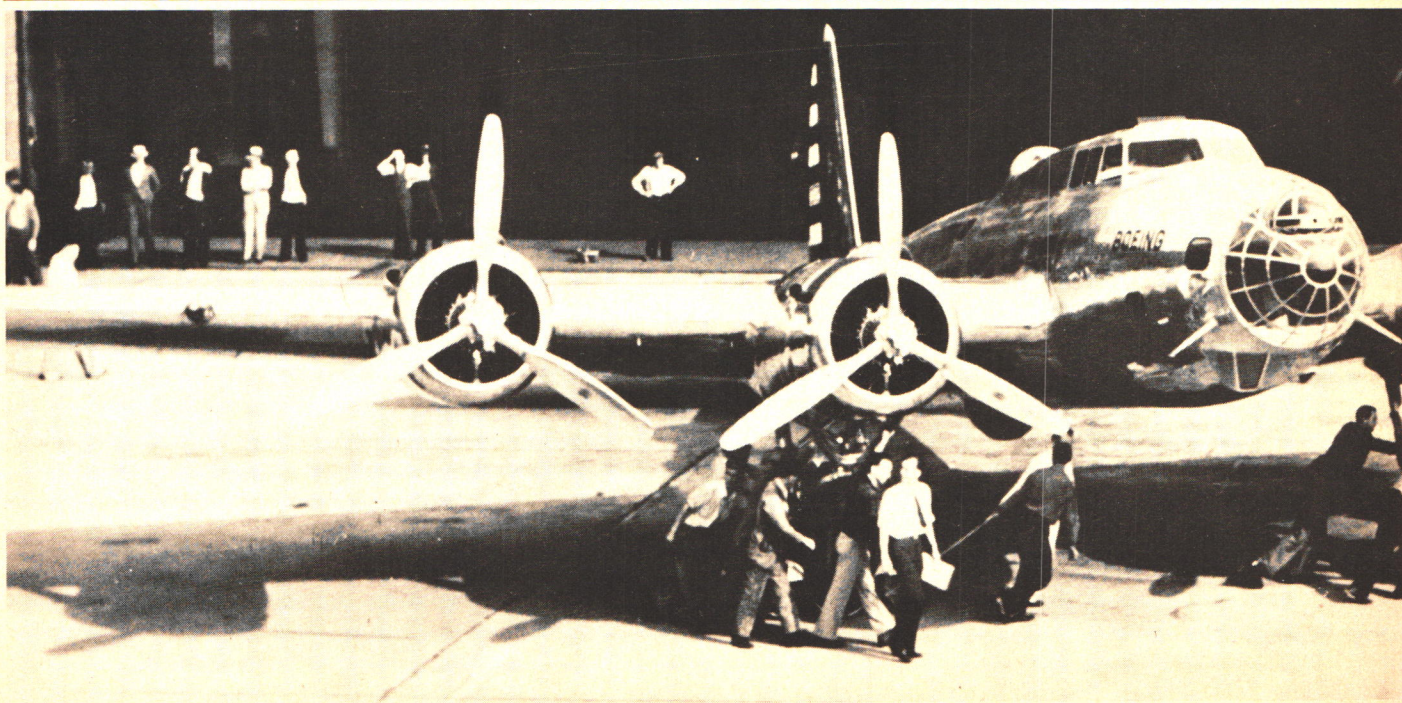
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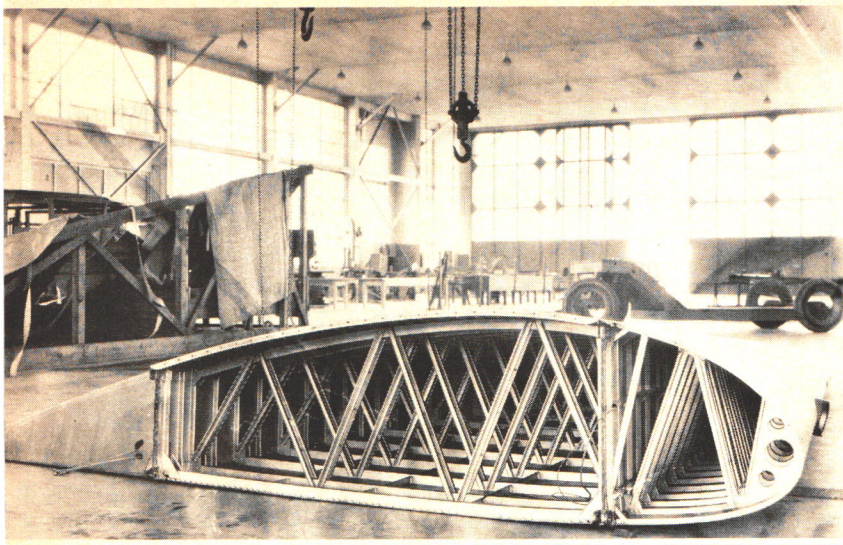


E



G





**A** Line-up of Martin B-12 bombers for a general inspection at Hamilton. The first aircraft is s/n33-188 of the 9th Bombardment (Medium), an outfit that had its origin in WW I. The nose emblem was a black and grey circle with searchlight beams arranged to form a silver Roman numeral IX.

**B** A 2,000 lb. bomb being loaded on the underwing shackle. This B-12 was assigned to the 31st Bombardment Squadron and the emblem was a black triangle bordered in white with a white skull and crossbones.

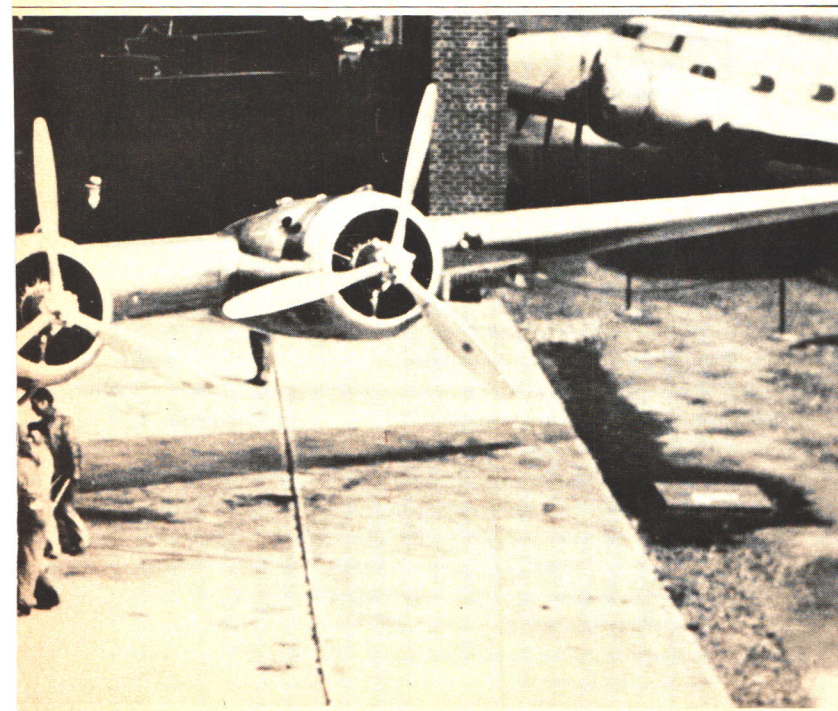
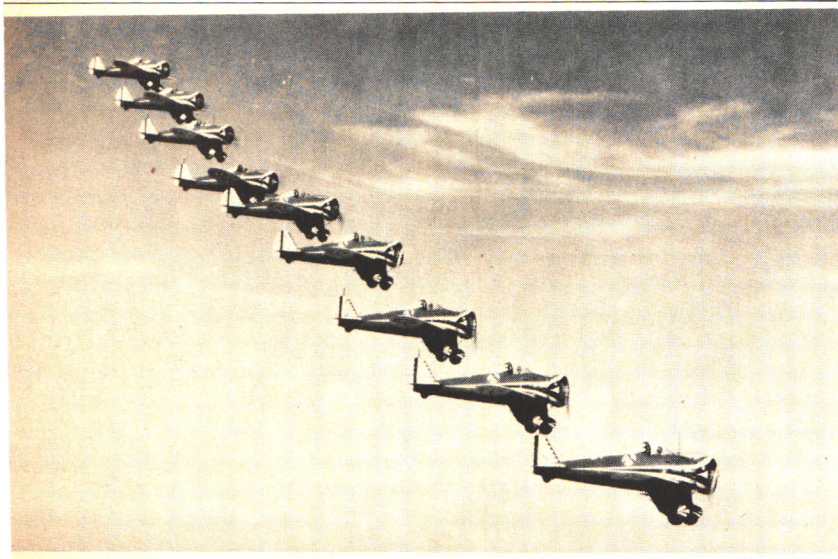
**C** Rugged wing section of a B-12 sits in a hangar at Hamilton waiting to be attached to a damaged bomber.

**D** Boeing P-26s litter the Hamilton ramp for an inspection. A pilot and ground crewman stand by a combined standard for the 17th Pursuit Squadron and the 34th (Thunderbirds) Attack Squadron. Most of the nimble P-26s in the photo carry the marking of the 95th Attack Squadron with its famous kicking mule insignia.

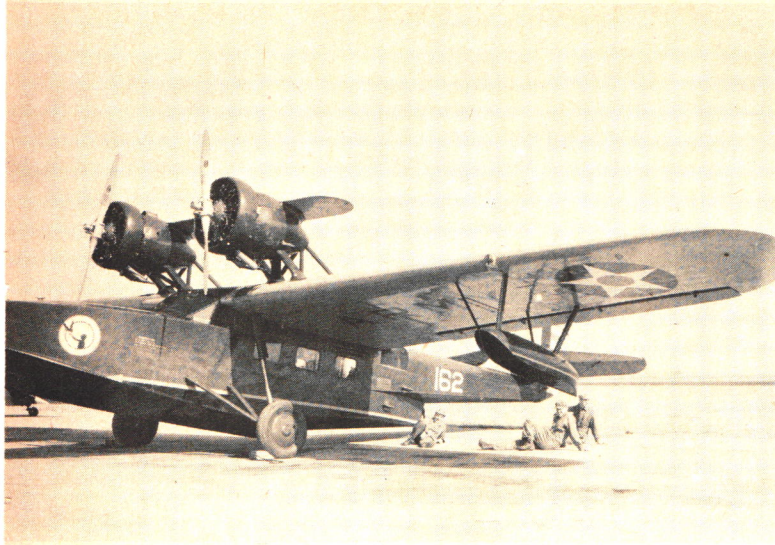
**E** Hangar full of 95th Attack Squadron P-26s. The insignia comprised a light blue oval with a kicking mule painted brown. The squadron flew P-26s from 1934 to 1935 and then converted, strangely enough, to P-12s which they flew from 1935 to 1936.

**F** Thunderbirds over Hamilton.

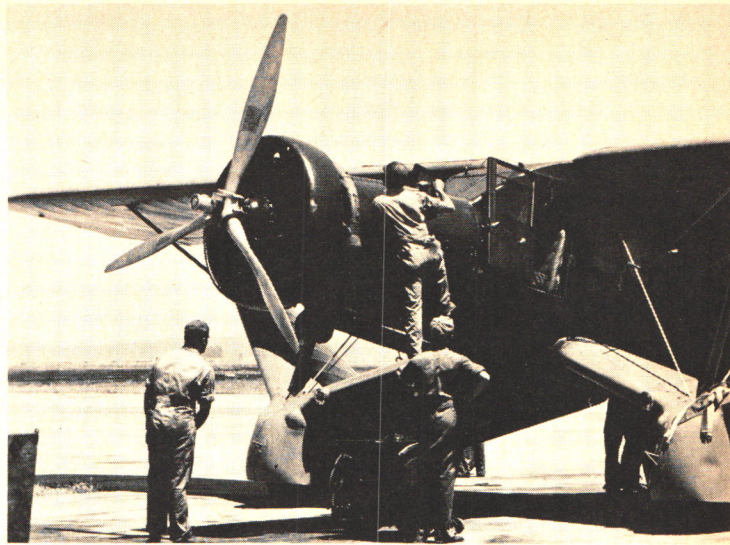
**G** Many of the officers from Hamilton's bombing squadrons traveled to Seattle to see the first flight of the Boeing 299 on 28 July 1935. The craft was designated unofficially "XB-17" but was a company owned aircraft and carried the civil registration of (N) X13372. It crashed on 30 October when an Army pilot took off with the controls locked. The wreckage was salvaged and a section of the fuselage containing the side gun blisters was used at Wright Field for developing improved gun mounts for late B-17 models. Although barely visible in this photo, the large side blisters were blacked over to prevent reporters from seeing the "secret" interior.







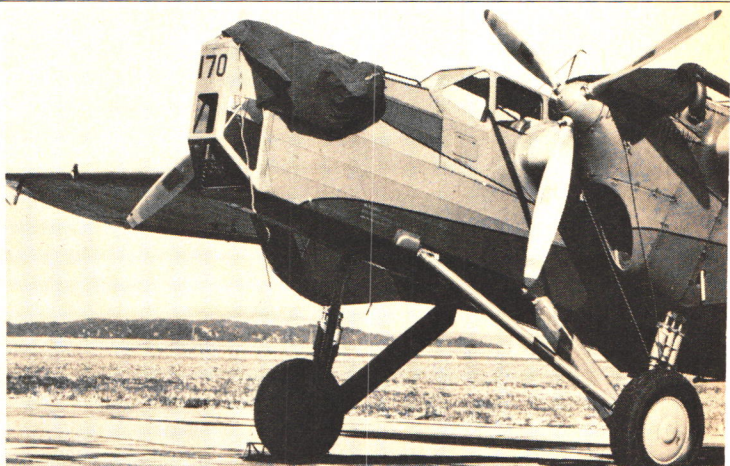
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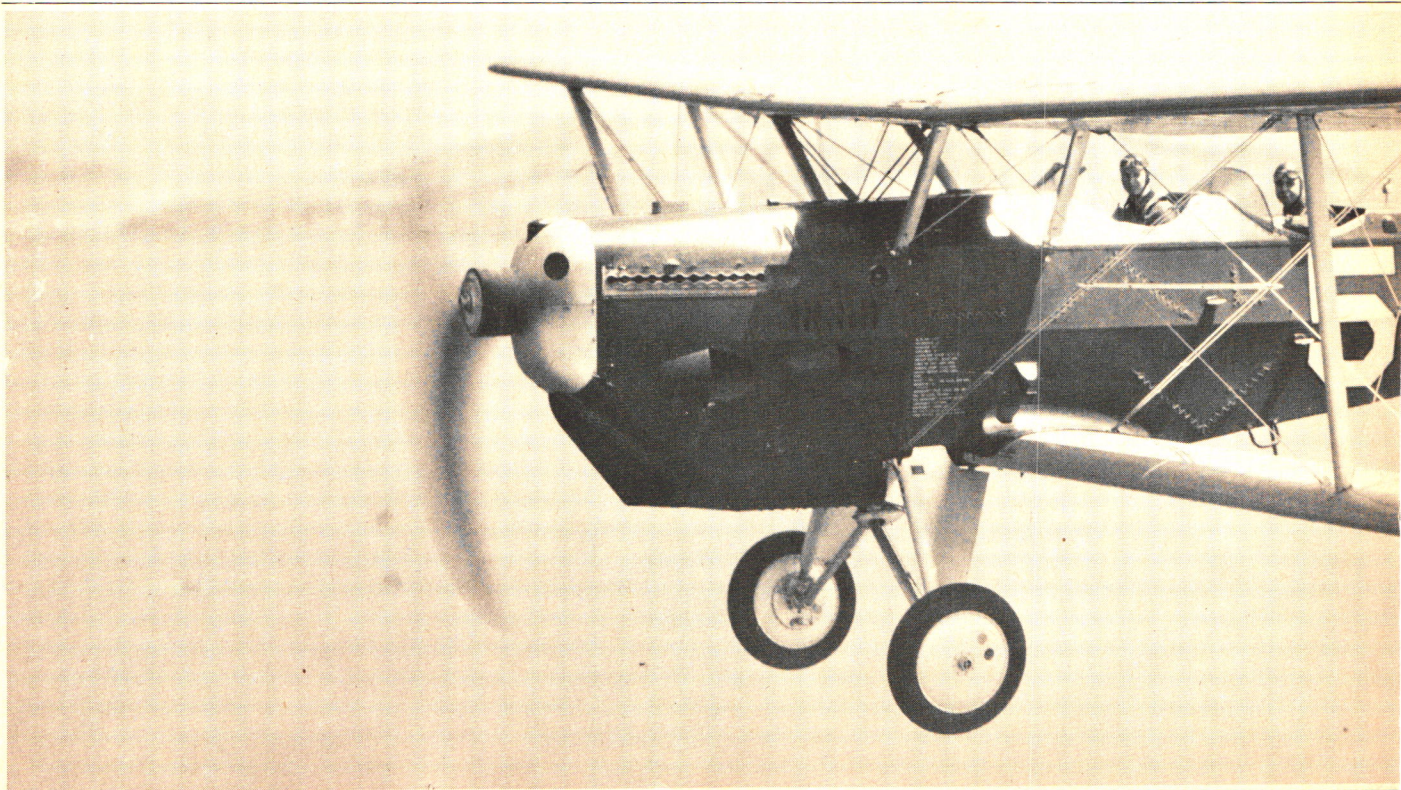
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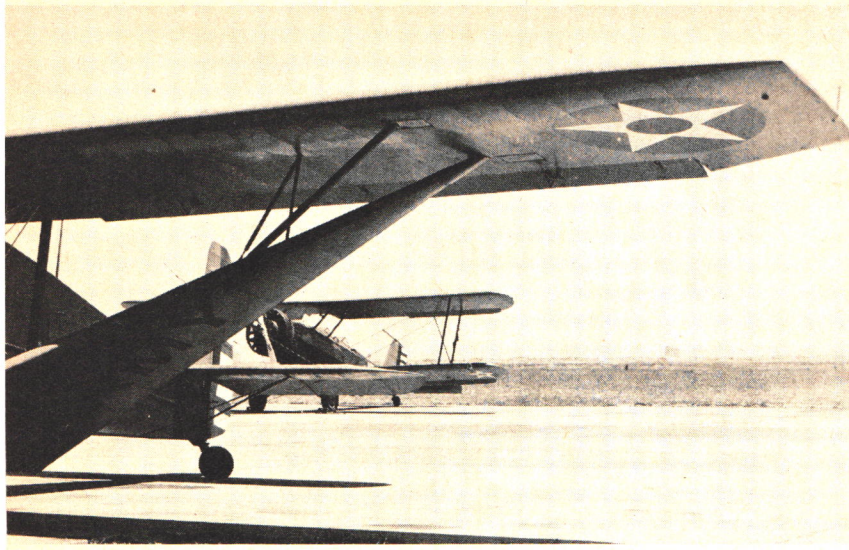


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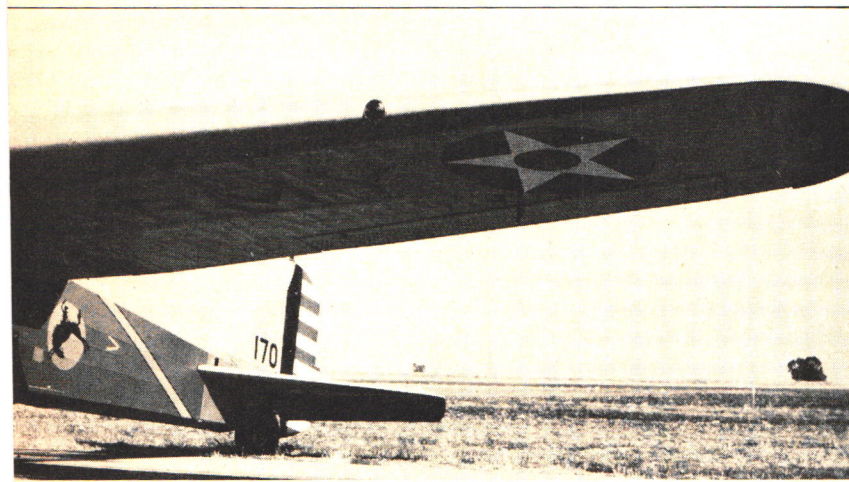


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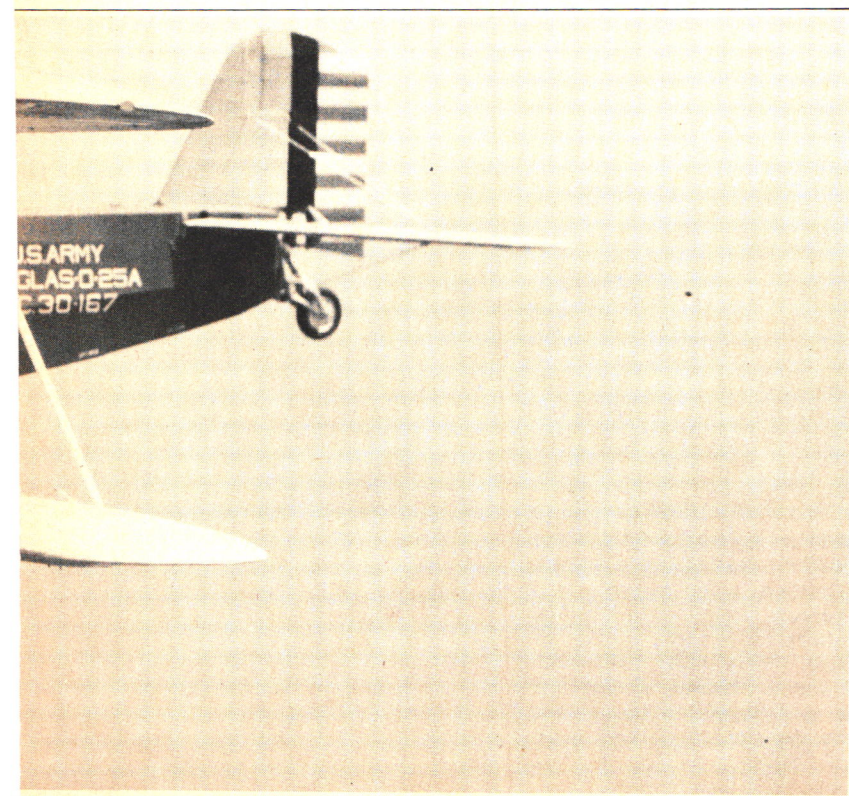




A The Douglas OA-4A was one of eight purchased by the AAC. They were formerly designated Y1C-26A and four were converted to OA-4C configuration. Power on s/n32-407 was provided by two P&W R-985-9 radials. Hamilton Field, being located next to San Francisco Bay, put the Douglas Dolphins to good use.



B The Bellanca C-27A was adapted from the civilian Airbus design. The Army purchased ten C-27As and later converted one to the C-27B configuration. The remaining nine were converted to C-27Cs. The Bellanca "lifting strut" served as a good place to paint U.S. Army. Again, the fuselage was olive drab and the flying surfaces were yellow. Note the ground crewman topping off the oil tank with what looks like an ice water pitcher!



C The General Aviation C-14 was used for cargo duties at Hamilton. Power was supplied by a Wright R-1750-3. Color scheme consisted of yellow flying surfaces and olive drab fuselage. General Aviation was the successor to Atlantic-Fokker whose influence is clearly illustrated in the thick plywood wing. Many of the aircraft designers of the 1920s and 1930s seemed to try very hard to locate the pilot in the most improbable position and the C-14 was no exception with the cockpit midway on the fuselage, which must have made visibility a bit difficult during landings and takeoffs.

D An ungainly Fokker O-27 s/n31-600 on the line at Hamilton. An interesting point to historians is that on the original print the military identification block on the side of the cockpit has identified the plane as an O-37, an obvious slip-up by the ground crew! The craft had yellow flying surfaces and a blue fuselage. The cowboy and horse insignia denote an aircraft assigned to the 88th Observation Squadron (Long Range, Amphibian) which was stationed at Hamilton from 1935 to 1940. The horse and rider are in black on an orange disc.

E A Douglas O-25A s/n30-167 over San Francisco Bay. Fifty-three of these observation machines were obtained during 1930 and were powered by Curtiss V-1570-7s of 600 hp.



# ZUYDER ZEE

(Text continued from page 26)

A quick check with R.A.F. archives showed that it belonged to No. 90 Squadron R.A.F. and that it was reported missing on April 27, 1943. Four of its crew were buried in Holland. There was no trace of the other three crew members.

As Dutch Air Force personnel dig around in the black polder mud, the aircraft they dig out of the reeds bring to bare in grim, vivid relief, aspects of the personal side of the air war that was fought high in the skies above Holland.

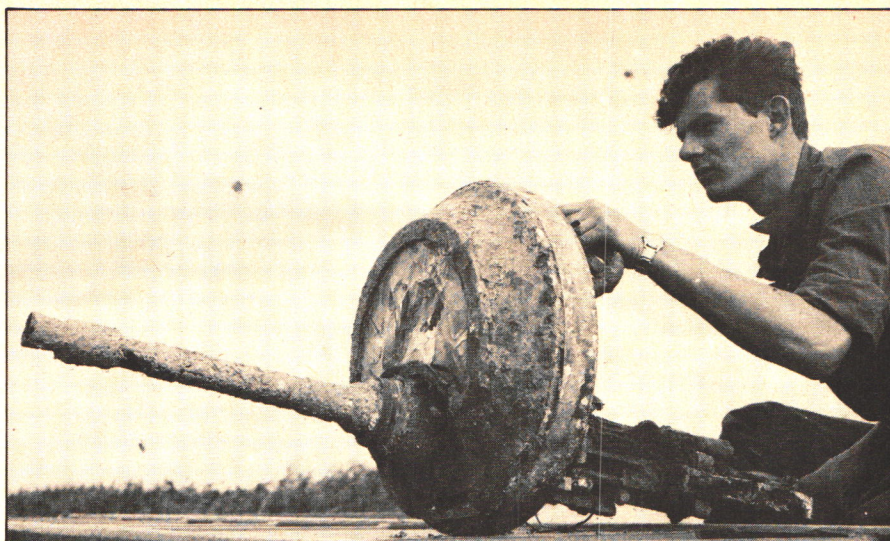
A rail pass belonging to a Spitfire pilot, perhaps to take him up to London for a weekend leave at the end of a mission that for him was to be his last; a bottle of Eau de Cologne in the salvaged cockpit of a Junkers 88 (obviously an aircraft used on long range missions since the perfume would have been used against the smells of man and motor that develop after hours in cramped quarters); escape maps; coins; stamps; map-printed silk scarves; a Maori "tiki" good luck charm belonging to a New Zealand pilot all bring home the point that it was not a war of machine alone—it was a war which involved human beings as well.

This human factor becomes an important element in R.N.A.F. excavation work. It is required by the Geneva Convention that bodies of soldiers, sailors and airmen fallen on foreign soil, all should be given decent burial. They should be found and identified wherever possible.

But how do you identify the crew of a Flying Fortress that has been beneath the sea for 25 years? This is a task that has drawn on all the ingenuity of the Dutch aero-medical archaeologists.

Their feats of identifying aircrew members from body remains are remarkable. From a few remaining bones they can tell if the crewmember was an athletic type; remains of teeth are a give a way as to whether he was a smoker.

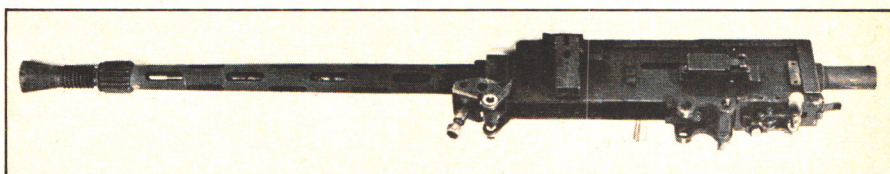
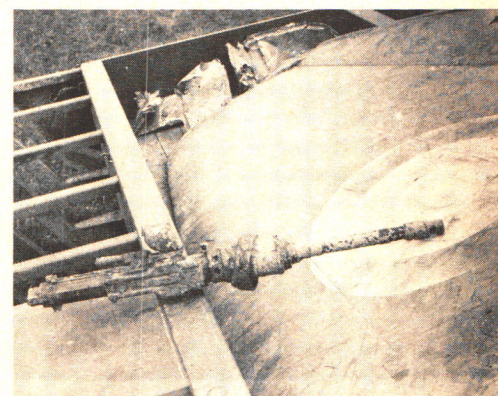
Remains of clothing often signify whether the crewmember was an air gunner or navigator. Sure sign of this were the electrically wired, fur lined flying boots. This was standard



This machine gun was taken from the rear turret of a wrecked Junkers 88. Some machine guns salvaged by the R.N.A.F. have been put back into working condition.

A German machine gun recovered from the IJsselmeer rests on the red/white/blue roundel of a Spitfire that spent 25 years on the bottom of the sea. The German machine gun is a Mark 151 type found on a Junkers 88.

After lying some 27 years on the bottom of the sea, this German .50 caliber machine gun was cleaned and put back in working condition.



Dutch excavation experts unearth a clip of heavy caliber machine gun bullets. Before excavation work begins on a wreck, a thorough examination of bomb load and armament records of the aircraft is made. There have been some reports of Dutch children finding machine guns and bullets in the polders and bringing them up to working order. The R.N.A.F., through an effective program of public education, can now count on public cooperation when it comes to reporting aircraft wreckage.



equipment for air gunners. Navigators and pilots who could move around the aircraft would in all probability have worn shoes.

Patches of clothing with the name of the wearer or manufacturer's trade marks provide helpful leads to body identification. Sometimes a complete arm bearing a wrist watch, or a foot with a shoe on it, perfectly mummified under the pressure of sandy mud for so many years, can help establish more positive identification.

All clues are checked and double checked against existing R.A.F. and U.S.A.A.F. records and in many cases positive identification of the bodies can be made.

Searches for individual crewmen missing in the IJsselmeer often take R.N.A.F. salvage teams into some of the more bizarre aspects of aviation combat history.

A few years ago, a Belgian woman telephoned Dutch Air Force headquarters in The Hague. She had been married to a Luftwaffe fighter pilot shot down in 1944. Nothing had been heard of him since that time. The woman, like many others close to servicemen listed as missing in action, could never be sure whether her fighter pilot husband was dead or not, until the final truth about what had happened to him had been brought to light.

Her husband had been the famous Focke-Wulf Fighter ace Captain Karl Heinz Willius with 48 kills to his credit. His unit was the famous Jacht Geschwader 26, which had been led by Major Willem Galland, who was subsequently shot down after scoring 55 victories. He was the brother of General Adolf Galland, who himself in the early days of the war had also led JG 26.

Willius was captain of the 2nd Staffel of 12 Squadron which had taken off on April 8, 1944, from its airfield Florennes in Belgium. This was to be a normal patrol, but above Brussels they were ground vectored to intercept a formation of American heavies.

These had just crossed the Dutch coast on their way to Germany. Eighth Air combat history shows that at this time 600 heavy bombers were sent out on mission to bombard aircraft depots and industrial targets in Western Germany, particularly in the Brunswick area, where the Liberators met heavy fighter opposition.

It was probably an intercept of this bomber stream that led to Willius being shot down.

The Focke-Wulfs jumped the Liberators at an altitude of 32,000 feet over Holland, somewhere between Zwolle and Meppel (right over the IJsselmeer zone). Willius and his

wingman Lt. Schild mixed in with a formation of 36 Liberators and he shot one of them down on his first pass.

In the history of JG 26, Lt. Schild tells of what happened to Willius in his last fight:

"Towards three o'clock we were jumped by a flight of P-47 Thunderbolts. Charlie was shot down, his left wing ablaze and dived towards the Zuyder Zee. That was the last we saw of him."

As far as the Luftwaffe was concerned that was the end of Willius, although Adolf Hitler decorated him posthumously. Willius soon after became one of the legion of Luftwaffe pilots and crewmen who were posted missing in action.

But almost 20 years after this air battle, Willius, or at least his body and the remains of his aircraft, were discovered by accident.

The Dutch daily newspaper "De Telegraaf" published an article based on the salvage work carried out by the R.N.A.F. in "Operation Harvest."

Lt. Colonel A. P. De Jong, Public Information Officer, R.N.A.F. received a telephone call from a farmer living at Genemuiden, near the IJsselmeer. The farmer said he had a German aircraft buried in his back yard.

Lt. Colonel De Jong's questioning drew out this fascinating story:

The farmer as a young boy had watched a vast air battle taking place above his small farm. A German fighter had crashed not far from his house. Later, German troops came to examine the wreckage. They filled in the crater and then left.

The young Dutch farmer's ring-side seat view of the battle tied in with official records. He was right on the ball about the date. It was the 8th of April, 1944. His mother's birthday, so there was no chance of being wrong about the date. It was three o'clock in the afternoon when he saw the German fighter come down. For Lt. Colonel De Jong this was the lead he was looking for in the search for German ace Willius.

Within a few days the R.N.A.F. salvage team had pulled the bullet-pocked wreckage of the FW 190 from the ground with the remains of its pilot. Later medical research as well as an examination of personal papers that were still legible, proved beyond doubt that the remains found in the Focke-Wulf fighter were those of Willius.

The records were put straight about his disappearance and his remains were taken to the General German War Cemetery in Holland and quietly buried. More importantly, the fears and anxieties of a widow

faced with a lifetime of anguish because she did not know what happened to her fighter pilot husband were put down.

"We cannot help but get involved in the human aspects of 'Operation Harvest,'" says Lt. Colonel De Jong. "The word has spread about our salvage work and we receive letters from all over the world—from Australia, Lebanon, New Zealand, the United States, South America and, of course, from European countries, from people seeing if we can provide any information about relatives or loved ones who might have been shot down over Holland.

"If we have the information, we can tell them details of the final combat, what time of the day the aircraft was shot down and what the weather was like, and strangely enough this sort of information tends to allay the anxieties of people who name airmen dead or missing among their relatives and friends.

Apart from the combat history aspect and the human element of the R.N.A.F. excavation work, there is an interesting "spin-off value" to the IJsselmeer salvage operation of "Operation Harvest."

Many parts of aircraft salvaged are still intact and are in good condition. Radio equipment, tires, gasoline, and even foodstuffs are brought to the surface after being buried for more than a quarter of a century under mud, sand and water.

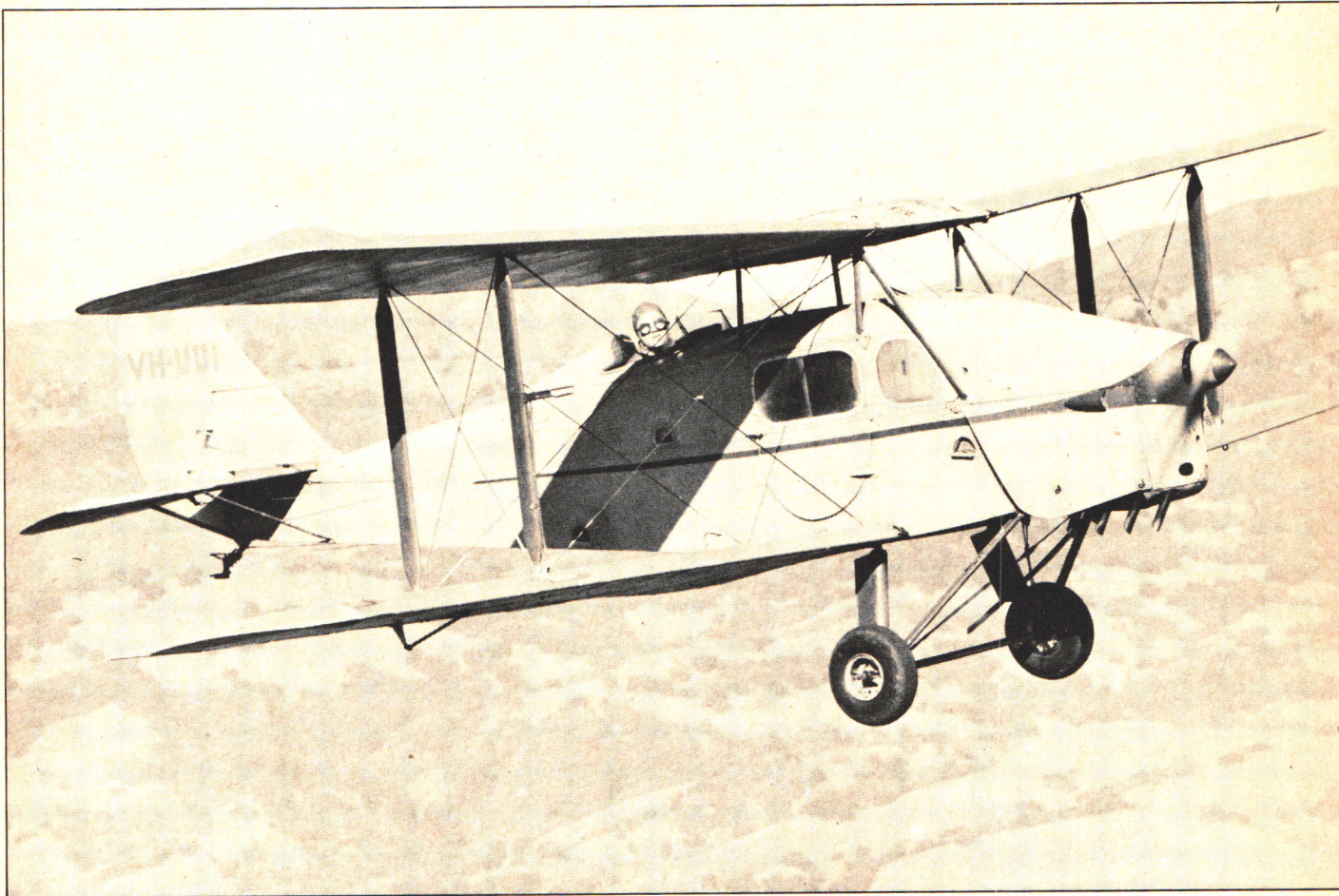
The original manufacturers of these materials ask for samples to be sent to them for laboratory analysis and a valuable contribution is being made to current aerospace research from these ghosts of aircraft hauled up from the bottom of Holland's inland sea. (Laboratory tests seem to indicate that American parts and materials have been the most durable under these extreme conditions.)

The R.N.A.F. in "Operation Harvest" is working on a giant jigsaw puzzle; the pieces are spread over many square miles under the sea. The puzzle will take a long time to complete. The task is a demanding one, symbolized by the memorial plaque at the American War Cemetery at Margraten. This plaque carries the names of 1,200 United States airmen missing in action and shot down over Holland.

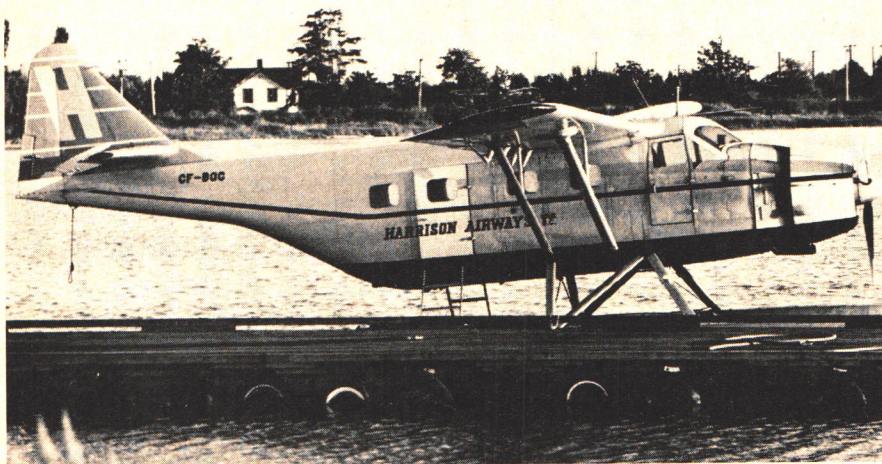
They are yet to be found. It will take the R.N.A.F. time, but with a dogged persistence, energy, and dedication for getting to the facts of the situation almost reaching the point of fanaticism, the full story of men who died in the skies over Holland and of their aircraft that crashed there will find a place in the pages of air combat history. ✈



# odds & mods



The Genairco was an Australian design of the 1930s. It bore a great deal of resemblance to the DeHavilland aircraft of the same period. The only known surviving example of the Genairco is now in the U.S.

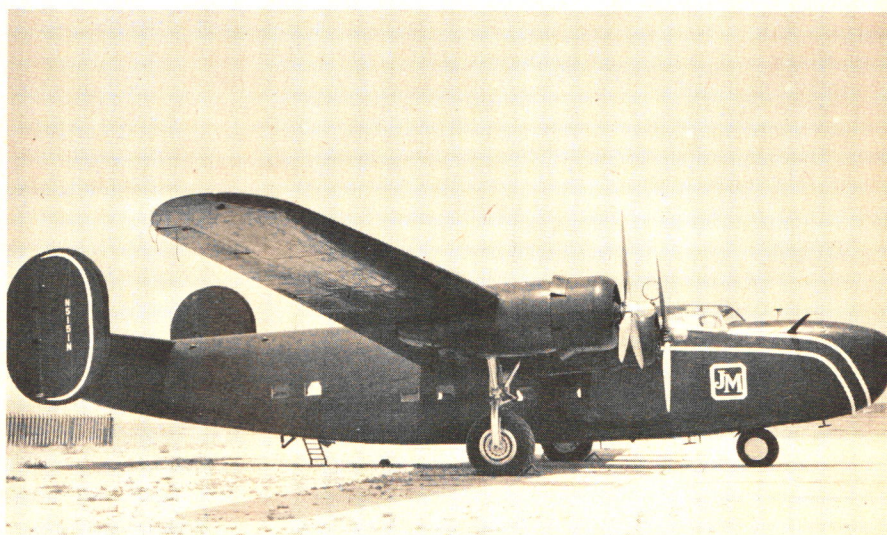


There are still several examples of the Fairchild Husky flying in Canada. The large single-engine transport was specially designed by Fairchild for bush operators. CF-BQC is operated, along with another example, by Harrison Airways, Vanc., B.C. (J. Whitehead)





The DeHavilland Beaver is a popular bush plane in Canada. A number have been converted to turbo-prop configuration with a lengthened fuselage and modified tail. CF-CKW has been mated to floats for amphibious operations. (J. Whitehead)



Although a fair number of B-17s entered the civil market after WW II, very few of its stable-mate, the Consolidated B-24, ever took up civilian markings. N5151N was a C-87 cargo version of the Liberator converted to a deluxe executive transport. The photo was taken at Santa Monica, California, during 1949. The ultimate fate of N5151N is not known. (E. Strasser)



# Subscribe **MUSTANG**

(Text continued from page 56)

ated," the USAF crews wasted little time selecting their respective targets and latching on. With 8th FBW F-80Cs orbiting high above the Han River to take care of anything which might try to sneak in that way, the curtain went up on what was destined to be one of the last prop-driven dogfights in history, one which marked the entire combat career of the Twin-Mustang.

Lt. William Hudson of the 68th,

and, going in to pointblank range, sieving the enemy plane from nose to tail. Forced to pull away, and nearly ramming another F-82 in the process, Hayhurst lost sight of his target, and no one else observed what happened to it, so he had to settle for a "damaged/probable."

Capt. David Trexler and Lt. Victor Helfenbein were in the second 339th machine, and went after the same plane that Hayhurst was firing on. However, they managed to stay with it longer, and saw it dive into the clouds, rolling slowly and possibly out of control. Since the tops of hills were poking through the clouds, it is unlikely that the enemy machine—identified as a Yak-9—could have pulled out.

So far the score stood at two Korean planes destroyed with one F-82 a bit chewed. Major James Little, leading the 339th flight, attacked the wingman of the plane Trexler and Hayhurst worked over as it attempted to close with the 68th aircraft, chasing it into the clouds and finishing it off. This third victory was identified as a Lavochkin La-7, the same type Moran destroyed. The survivors dove for the deck and scurried for safety across the 38th Parallel, American aircraft being forbidden to cross after them at that time. Apparently they were not taken seriously, because eight Ilyushin Il-10 ground attack planes blundered south early in the afternoon of the 27th, and fell afoul of a quartet of 35th Fighter-Bomber Squadron F-80Cs on high patrol over Seoul. Lt. Robert Wayne took out two of these antiques, while Capt. Raymond Schillereff and Lt. Robert Dewald accounted for one apiece. The North Koreans who survived beat a hasty retreat and combat operations for the 27th of June came to an end.

Despite the diversions overhead, flight operations at Kimpo and Suwon continued unabated and by the end of the day all 851 people on the ground had been evacuated safely. The 27th marked the end of ROK resistance, battered remnants of the shattered units streaming across the Han River to comparative safety. The collapse was hardly surprising: the South Koreans had been poorly trained and inadequately equipped; lacking effective artillery and with an air force which could have been annihilated by the Confederate Air Force at Harlingen in the course of a Sunday afternoon, they could not possibly have halted the Communist advance. Slowing it down, even, was a staggering accomplishment.

The United States was now faced with a dilemma: abide by the old



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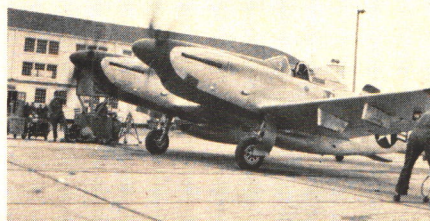
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The 27th again, apparently another E from the same squadron. The installation of two pylons on each outer panel, of completely different shape, is noteworthy; the centersection pylons have been removed.

with Carl Fraser riding shotgun in the right-hand cockpit as his Radar Observer, jumped a dirty silver Yak-11, a trainer with the NATO code name of "Moose" and an unlikely choice for a tactical fighter, and chased it into a layer of low clouds, popping away and picking bits off. The Communist pilot racked his plane into a steep bank to the right. Hudson turned inside, and put a solid burst into the right wing, blowing the flap and aileron off and setting the fuel tank ablaze. The pilot scrambled over the side and popped his parachute, but his observer fell forward in the rear cockpit and went in with the now-flaming plane.

At almost the same instant a second F-82, piloted by Lt. Charles B. Moran (also from the 68th) nosed over to recover from a stall. The plane had taken a few hits from two of the Communist planes, Moran pulling hard back to get clear and stalling as a result. As he picked up airspeed again he found himself dead astern of one of the enemy machines—in fact, the wingman of Hudson's kill—and blew it out of the air after a short chase.

Planes from the 339th, flying cover for the 68th's section, dropped into the fray while Hudson and Moran were dicing with their respective opponents. Lt. Walt Hayhurst and his RO, Lt. Cliff Mills, found themselves in position to attack one of the surviving North Korean aircraft, opening fire at a range of 100 yards



policy of non-interference until the invading North Koreans gave up and went home, or actively enter the war and so give the Republican forces a chance to regroup, re-equip, and retake their country. Inevitably, feeling that involvement was the only logical alternative, U. S. Army units were sent in to reinforce the Koreans and to halt the advancing Communist forces, while the Fifth Air Force turned its tactical aircraft loose on anything moving south of the supposed border. The 374th's aircraft were pressed into service hauling ammunition to the Republic troops, with the creaking F-82s of the 68th flying top cover. One packed up and fluttered onto the strip at Suwon, where it kept a 3rd Bombardment Wing B-26 with a shot-out engine company. The next day, the 28th, North Korean aircraft made an appearance, strafing these lame ducks and jumping C-54s as they attempted to land supplies, destroying one on the ground. The 29th saw pressure building, despite air strikes made by everything from P-51s to B-29s, the remaining United States forces were ordered out of the Seoul area, and the two riddled machines still at Suwon were burned to prevent their capture.

Night fighters were not intended to attack ground targets, nor to engage in white-scarf dogfights. With only 168 left on hand, with sufficient spares to maintain these aircraft for only another 60 days, the decision was made to pull them out of day combat and put them back on point-defense for Japanese bases. A short-lived attempt was made to use them for night intruders, but the ground scatter effectively canceled out their radar. A strike against the rail yards at Seoul, following the capitol's capture, proved profitable, however, with three locomotives and several strings of cars being destroyed on the night of August 30. July 10 saw the last daylight appearance of the F-82 in a ground-attack role, when a bombed bridge held up southbound traffic until a target so tempting that it had to be nailed by anything with wings built up. The night-intruder missions were barely as profitable as that on the 30th, and in the course of one, Charlie Moran and his RO smashed into a hill, the wreckage being found 18 months later.

The F-82's days were numbered now. The first of the Lockheed F-94s were arriving in Japan, heavily-armed developments of the ubiquitous T-33 Training Star, itself a spinoff of the dependable F-80. The need for a propeller-driven night fighter was diminishing — for that matter, any prop job was beginning to look like

a museum exhibit—and the planes were shifted to flying weather reconnaissance missions over the north at night. The inevitable happened at last, and the F-82s were pulled out of Korea and the FEAF entirely, 14 of them going to Air Defense Command squadrons in Alaska. Redesignated F-82H and winterized, with modified plumbing and heating systems, coolants which would not freeze, provisions for carburetor-heating, and revised radio equipment; the radar pod removed; and their black paint jobs stripped, high-visibility red covering the aft fuselages and outer wings, the planes were drawn from the remaining F-82Gs, with serials running in two blocks: 46-384 through 388, and 46-496 through 504.

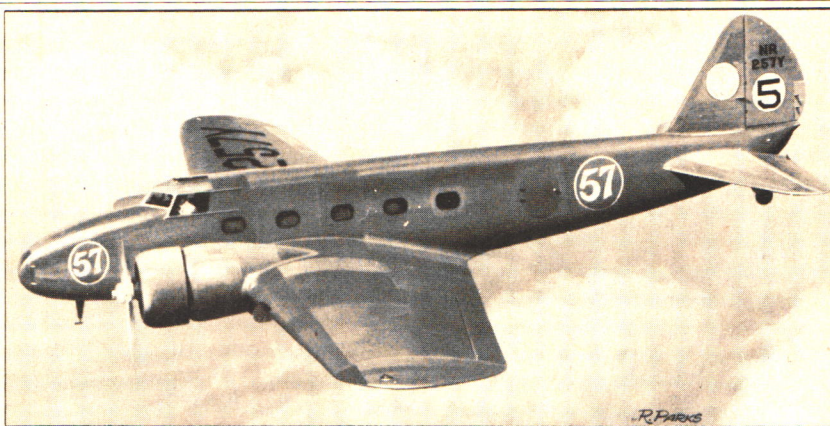
The end came soon after: On 12 November 1953 the last active F-82H, one of the Alaskan-based Hs, was flown from its base at Ladd Field to Elmendorf AFB. The exact means of disposing of the aircraft has not been identified yet. One report, quite possibly sheer rumor, is that the aircraft were lined up and grenaded, to break their backs, stripped of whatever was still considered useful, and left to the elements.

A few Twin-Mustangs still survive, fortunately: "Betty Jo," following its

record-setting long-distance flight, knocked about doing the odd job, and in 1957 was sent to the Air Force Museum; another example, flown by NACA, fitted with an H-style tail fin, corrodes in the hands of an Eastern crank, who also owns one of the fuselages from the original XP-82; an Allison-powered machine is on display at Lackland AFB, in Texas, now covered with a coat of black paint which may or may not be appropriate. Only one airworthy example is left, a Merlin-powered airplane owned by the Confederate Air Force and based at Harlingen, Texas. Modified for test purposes during its service career and redesignated "EF-82B," 44-65162 has been licensed as N12102; at present it is undergoing a complete airframe overhaul, with new engines scheduled to be installed. Once the work has been completed, Damn Yankee Air Force intruders, look out, 'cause you're in dire danger of being eaten up by the last of a gutsy breed!

My sincere thanks to Gerald Liang, Brian Baker, Dan Buccowich, and Gene Boswell of North American Aviation, Inc., whose help—in the form of photographs, technical, and historical information — made this brief history of a fascinating and virtually unknown airplane possible. ✈

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# WARBIRD

(Text continued from page 15)

believed me so he let us launch it.

"Ley went on to become one of the space age's first experts. He collaborated with Wehrner von Braun in many of the pioneering projects after WW II. Others who were there that day increased their interest and went on to found Reaction Motors. One of the men, a young Princeton student named James Wyld, later developed the first commercially practical rocket engine in America.

"One of the craft that flew that day was taken to the New York Museum of Science and Industry and apparently was lost when that institution was closed. The other hangs on Moran's property—a forlorn symbol of the fact that nobody thought the project was worth anything.

"Ley tried to interest the U. S. Army, which said that 'rockets would never be of any military value.' He tried to interest France, but the French were depending on the impregnable Maginot line to protect them. He was rebuffed everywhere.

"The one nation which approached the rocketeers was Germany. They sent representatives to see the craft. Willy Ley wasn't about to sell to the Germans. He was a Jew. He had left Germany because he could forsee what was happening there. So, the 'Gloria' was placed in Moran's barn, where it hangs today.

"The Germans weren't blind, though. The first V-1 rockets they fired at England were strangely similar to the battered hulk which hangs in the barn. The engine which Ley put together is much similar to those used even today in rockets. So the 'Gloria,' named after Schleigh's daughter, may well be a bit of American history worth preserving."

Interested parties may get in touch with Mrs. Moody at 118 High Mountain Road, Wanaque, New Jersey 07465. (201) 835-6054.

**MORE ON ROCKDALE B-25s.** Several of our readers took note of the mention of possible B-25s at the Rockdale, Texas, Airport. Thanks to Guy R. Claybourn Jr., B. H. Courtney, and Paul R. Byrne who took the time to investigate and report the following facts. There are four B-25s at Rockdale as follows: 1) TB-25K-25-NC, USAAF s/n44-30010, Civil reg. N9641C; 2) TB-25K USAAF s/n44-30090, civil reg. N9633C; 3) TB-25N-35-NC USAAF s/n44-30898, no visible civil reg.; 4) B-25 no visible US AAF s/n, civil reg. N9643C.

B-25 #2 has the left engine and wing removed and remnants of James Connally AFB insignia can be seen by the cockpit. Apparently all of the B-25s are up for sale and the airport hangar is crammed full of new and used B-25 parts. There were a number of B-26s at the field but they were flown out several years ago and scrapped. In the weeds around the perimeter of the field are six or seven very rare hulks of Waco CG-13 troop gliders. The airport manager said that there used to be a large number of surplus troop gliders at the field but most of them were sold to house boat builders who converted the fuselages into hulls.

**MORE GLIDERS.** Jerry Liang recently stumbled onto two rare Waco CG-4A troop gliders in Fresno, Calif. One is mounted on top of a tire outlet and looks to be fairly complete although badly weathered. The other is in a junkyard near Fresno and again appears to be mostly complete although many of its parts are scattered over the nearby grounds. The original Army paint scheme can still be made out. We notified the USAF Museum but they already have a CG-4A in store. Is anyone interested in restoring these old troop gliders or are there anymore moldering away at forgotten airfields?

**RAZORBACK FOR SALE.** Tony Aleman recently drew our attention to an ad in Trade-A-Plane. The advertisement offers a Republic P-47D-2-RE s/n42-8205, recently purchased from a foreign air force, in excellent restorable condition for sale or trade. The owner will accept Cat 950, D6 through D9 tractors, new cars or aircraft in trade. If you are interested contact Jim Cullen, Westair International, (303) 481-2286.

**B-17 CRASH — 30 YEARS LATER.** Chris DeGuitaut, organizer of the Fresno Gathering of Warbirds (see the January issue of **Air Classics**), recently came in contact with crew members of a B-17 that he saw shot down over France. The Fresno **Bee** reports the following: "For 30 years, Chris DeGuitaut has wondered what happened to two American airmen he saw parachute from a fatally crippled B-17 bomber over LaBaule, a seacoast town in his native France.

"Today the Fresnan knows one of them, at least, is still alive, the second probably is, and a third airman, who he did not see bail out, also quite likely still is alive and presumably well somewhere in the United States. DeGuitaut was a lad  
(Please turn page)



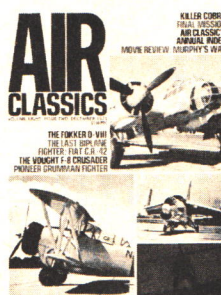
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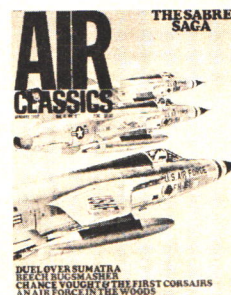
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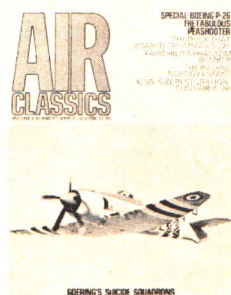
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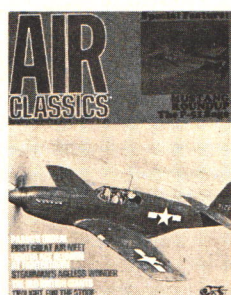
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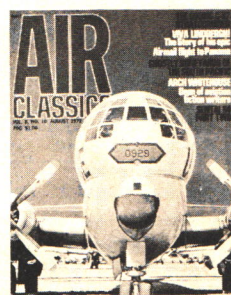
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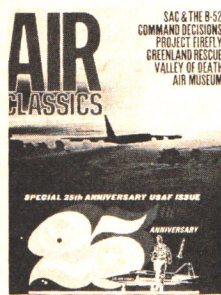
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# WARBIRD

(Text continued from page 80)

of 15, working with the French under-  
 ground in those days of WW II. His  
 family had a summer home at La  
 Baule, near St. Nazaire.

"La Baule was one of the German  
 Navy's major submarine pens and it  
 was a heavily guarded installation.  
 U.S. airmen knew it as 'Flak City'  
 because of the heavy anti-aircraft fire  
 they encountered on the almost daily  
 bombing runs. 'On this particular  
 September day in 1942, a friend and  
 I had bicycled to the beach about  
 the time a flight of American bombers  
 came over,' DeGuitaut recalls. 'We  
 saw several of them take hits from  
 the flak, but one in particular we  
 watched as it moved out of forma-  
 tion and started downward. About  
 that time two German fighters, Fw-  
 190s, fired cannon bursts at the plane  
 and a wing tore off.'

"Almost coincidentally, he saw two  
 parachutes open and two men  
 splashed into the sea. They were  
 taken prisoner almost immediately.  
 With his friend, Chris hurried inland  
 to where the plane had crashed in  
 a wooded and duned area. Their  
 goal as resistance fighters was to  
 recover what ammunition they could.

"I looked into the tail section,  
 which was split away from the rest  
 of the fuselage, and saw no bodies,  
 so I surmised one of the chutists had  
 been a tail gunner,' he said.

"There were bodies in the forward  
 section, which was burning. I man-  
 aged, for some reason, to snatch up  
 a part of the plane's navigation log.  
 Then we got out.'

"When DeGuitaut came to America,  
 and to Fresno to live, several years  
 later, he brought the chards of the  
 log with him. He also brought a  
 recollection of the plane he watched  
 die. It bore the insignia of a bomb  
 painted on its nose which was ridden  
 by three dwarfs. Above the painting  
 were the words 'Snap, Crackle, and  
 Pop.'

"For years I kept asking pilots  
 who stopped off at Chandler Airport  
 if they knew anything about the plane  
 or its crew,' he says. DeGuitaut is a  
 pilot and also runs the airport coffee  
 shop. 'None did.'

"Two years ago part of his search  
 paid off. He got his hands on a copy  
 of *Air Classics* that pictured some  
 of the 8th Air Force bomber nose  
 art, and one of them was 'Snap,  
 Crackle and Pop.'

"The story noted that the plane  
 had fallen in combat. He wrote to  
 Boeing Aircraft in Seattle, hoping

they could tell him more. They could  
 not, but suggested he get in touch  
 with George Parks, the secretary-  
 treasurer of the 91st Bomb Squadron  
 Association. Parks, in Vallejo, said a  
 reunion of bomber pilots stationed  
 in England was scheduled in Fair-  
 field and why didn't DeGuitaut attend  
 and tell his story. He did.

"I met Maj. Gen. Stanley Wray,  
 who was a colonel with the group  
 in England,' he states. 'I gave him  
 what was left of the plane's naviga-  
 tion charts, which he in turn pre-  
 sented to the USAF Museum in Ohio.  
 Because they were intrigued with the  
 story, and, as I was interested in  
 knowing if the two men had survived,  
 the museum people searched their  
 records and finally found the names  
 of the three survivors.'

"DeGuitaut learned subsequently  
 that he had not seen the third man  
 because when he left the bomber he  
 delayed opening his chute until the  
 last minute.

"He was Allan McGee and he  
 crashed into the roof of the La Baule  
 railroad station,' he reports. One of  
 the other two is James Gordon of  
 Humboldt, Kansas. The other is Glen  
 Harrington of Las Vegas. Telephone  
 calls failed to locate Harrington, but  
 he finally located Gordon, who has  
 since moved to Texas. 'We had quite  
 a chat and Gordon verified every-  
 thing I remembered about the inci-  
 dent and promised to try and find  
 Harrington and McGee, and all would  
 try to get to the reunion in 1974.

"Because of everyone's interest  
 in the story, I hope we can find the  
 people involved. Even if we don't, it's  
 very gratifying to me to know they  
 survived captivity, the war and every-  
 thing else.'"

FOR THE WRECKORD. Jim Babcock  
 and Dale L. Alter reported some extra  
 details on the TBMs that crashed  
 in California during August, 1973.  
 N9083Z, #28 BuNo53492, was owned  
 by Aero Union and crashed fatally  
 with a Forest Service spotter plane.  
 N1366N, #60 was owned by TBM,  
 Inc., and crashed after it lost power  
 over the Placerville fire. The pilot  
 belly landed the craft which burned  
 but he escaped. N9548Z, #76, lost  
 power after takeoff from Stockton  
 Airport. It was badly damaged in the  
 resultant belly landing. It was Navy  
 BuNo91598 and the pilot walked  
 away.

Mike Neligh recently came across  
 a wrecked On Mark A-26 in Homer,  
 Alaska, on the Kenai Peninsula about  
 120 miles south of Anchorage. The  
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 and the remainder is available for  
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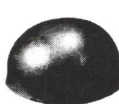
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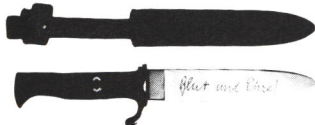
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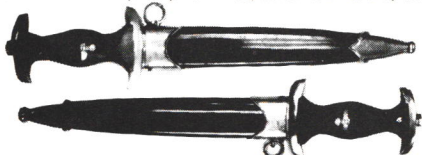
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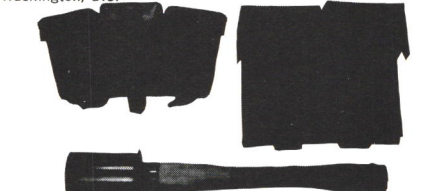
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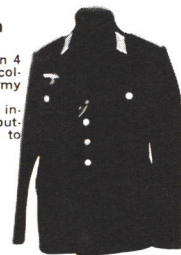
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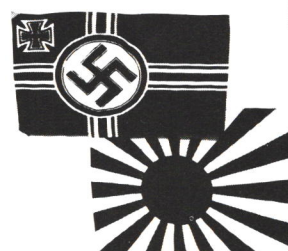
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